```
=> s histamine#
L1      126067 HISTAMINE#

=> s l1 (5a) (antibod?)
L2        1078 L1 (5A) (ANTIBOD?)

=> s l2 (p) (allerg?)
L3         298 L2 (P) (ALLERG?)

=> s l3 (p) (IgE)
L4         183 L3 (P) (IGE)

=> s l4 (p) (method# or treat? or administ? or therap?)
L5          71 L4 (P) (METHOD# OR TREAT? OR ADMINIST? OR THERAP?)

=> d l5 1-71 bib ab

L5   ANSWER 1 OF 71     MEDLINE on STN
AN   2003028063     MEDLINE
DN   22422801   PubMed ID: 12534555
TI   Humoral and cellular responses to gliadin in wheat-dependent,
     exercise-induced anaphylaxis.
AU   Lehto M; Palosuo K; Varjonen E; Majuri M-L; Andersson U; Reunala T;
     Alenius H
CS   Finnish Institute of Occupational Health, Helsinki, Finland.
SO   CLINICAL AND EXPERIMENTAL ALLERGY, (2003 Jan) 33 (1) 90-5.
     Journal code: 8906443. ISSN: 0954-7894.
CY   England: United Kingdom
DT   Journal; Article; (JOURNAL ARTICLE)
LA   English
FS   Priority Journals
EM   200305
ED   Entered STN: 20030122
     Last Updated on STN: 20030508
     Entered Medline: 20030507
AB   BACKGROUND: Wheat-dependent, exercise-induced anaphylaxis (WDEIA) is a
     severe allergy where wheat ingestion together with physical
     exercise induces anaphylaxis. We have previously shown that patients with
     WDEIA have IgE antibodies against gliadin proteins and
     identified omega-5 gliadin (Tri a 19) as a major allergen.
     OBJECTIVE: The aim of this study was to examine gliadin-specific IgG
     subclass, IgA and IgE antibodies, basophil
     histamine release and cell-mediated responses in WDEIA.
     METHODS: Sera and peripheral blood mononuclear cells (PBMC) were
     obtained from patients with WDEIA and from controls without wheat
     allergy. Serum antibodies to crude gliadin extract (CGE) and
     purified omega-5 gliadin were measured by ELISA and basophil reactivity by
     histamine-release test. Gliadin-induced cell-mediated responses were
     assessed by lymphocyte proliferation assay, and cytokine mRNA expression
     with real-time quantitative PCR. RESULTS: All patients with WDEIA, but
     none of the controls, had IgE antibodies to CGE and omega-5
     gliadin. Both allergens released high levels of histamine from
     the basophils of patients with WDEIA. Levels of IgA antibodies to CGE and
     omega-5 gliadin were significantly elevated in the patients, but the
     distribution of IgG subclass antibodies showed no statistically
     significant differences between the two groups. Proliferative responses
     of PBMC to CGE were increased in patients with WDEIA, and stimulation of
     PBMC with CGE caused, both in patients and in controls, a clear induction
     of IL-10 mRNA. Compared with the controls, induction of IL-10 mRNA
     expression in patients with WDEIA was significantly (P < 0.01) suppressed.
     CONCLUSION: These results suggest that, in addition to IgE
     antibodies against omega-5 gliadin, specific IgA antibodies may be
     involved in the pathogenesis of WDEIA. Decreased expression of IL-10 mRNA
     in PBMC during gliadin stimulation may facilitate the development of
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gliadin-specific T cell responses.

L5 ANSWER 2 OF 71 MEDLINE on STN
AN 2002615472 MEDLINE
DN 22259674 PubMed ID: 12372125
TI Threshold levels of purified natural Bos d 2 for inducing bronchial airway response in asthmatic patients.
AU Zeiler T; Taivainen A; Mantyjarvi R; Tukiainen H; Rautiainen J; Rytkonen-Nissinen M; Virtanen T
CS Department of Clinical Microbiology, University if Kuopio, Kuopio University Hospital, Finland.
SO CLINICAL AND EXPERIMENTAL ALLERGY, (2002 Oct) 32 (10) 1454-60. Journal code: 8906443. ISSN: 0954-7894.
CY England: United Kingdom
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 200303
ED Entered STN: 20021010
Last Updated on STN: 20030326
Entered Medline: 20030325
AB BACKGROUND: Provocation tests are invaluable in establishing threshold levels and a causal relationship between atopic asthma and a certain **allergen** source, especially in relation to work-associated exposure. Purified major **allergens** open possibilities for a more accurate assessment of sensitization. OBJECTIVE: To determine the threshold dose of purified major bovine dander **allergen** Bos d 2 in bronchial provocation in comparison with the standard **allergen** and a set of other parameters of **allergy**. **METHOD**: Nine consecutive patients referred to hospital for confirming the bovine origin of their occupational asthma were subjected to bronchial provocation tests with purified natural Bos d 2 and a standard bovine dander **allergen**. Additional tests included bronchial histamine challenge, measurements of total **IgE**, specific **IgE** antibody determinations and skin prick tests (SPT) with both **allergens**. RESULTS: In the provocation tests with Bos d 2, a 15% decrease in the forced expiratory volume in 1 s (FEV1) and/or peak expiratory flow (PEF) values in eight out of nine patients confirmed the predominant role of Bos d 2 in the sensitization. The threshold dose of Bos d 2 varied from 0.1 microg to > 100 microg (median +/- median absolute deviation = 4.5 +/- 3.9 microg). A positive SPT was induced by a median dose of 13.9 +/- 9.8 microg of Bos d 2. Bronchial response to **histamine** and **IgE antibodies** against Bos d 2 showed the highest correlations to the provocations results. CONCLUSIONS: The efficacy of Bos d 2 in bronchial provocation in patients with occupational cattle-associated asthma was confirmed and the range of the threshold level was determined. There were individual variations, but the response in provocation remains the reference **method** for identification of the cause of occupational atopic asthma. SPT and the measurement of specific **IgE** antibodies, preferably with purified or recombinant major **allergens**, increase the accuracy of the diagnosis.

L5 ANSWER 3 OF 71 MEDLINE on STN
AN 2001058341 MEDLINE
DN 20376913 PubMed ID: 10921468
TI Loratadine in the treatment of mosquito-bite-sensitive children.
AU Karppinen A; Kautiainen H; Reunala T; Petman L; Reunala T; Brummer-Korvenkontio H
CS Department of Dermatology, University of Tampere, Finland.
SO ALLERGY, (2000 Jul) 55 (7) 668-71. Journal code: 7804028. ISSN: 0105-4538.
CY Denmark
DT (CLINICAL TRIAL)

Journal; Article; (JOURNAL ARTICLE)
(RANDOMIZED CONTROLLED TRIAL)
LA English
FS Priority Journals
EM 200012
ED Entered STN: 20010322
Last Updated on STN: 20010322
Entered Medline: 20001222
AB BACKGROUND: Children frequently experience harmful whealing and delayed papules from mosquito bites. Whealing is mediated by antisaliva **IgE antibodies** and **histamine**, but the effect of antihistamines on mosquito-bite symptoms has not been evaluated in children. **METHODS**: The effect of loratadine (0.3 mg/kg) was examined in 28 mosquito-bite-sensitive children (aged 2-11 years). The double-blind, placebo-controlled, crossover study was performed with exposure to Aedes aegypti laboratory mosquitoes. The size of the bite lesion and the intensity of pruritus (visual analog scale) were measured at 15 min and at 2, 6, and 24 h. RESULTS: Loratadine decreased the size of the wheals by 45% ($P < 0.001$, 25 children) and accompanying pruritus by 78% ($P = 0.011$, 12 children) at 15 min compared to placebo. The size of the 24-h delayed bite lesion also decreased significantly ($P = 0.004$), but there was no change at 2 or 6 h. Loratadine was well tolerated and no marked side-effects were recorded. CONCLUSIONS: This study in children shows that prophylactically given loratadine decreases significantly the whealing and pruritus caused by mosquito bites and also reduces the size of the 24-h bite lesions. Therefore, the **therapeutic** profile of loratadine extends from immediate to delayed **allergic** symptoms in mosquito-bite-sensitive children.

L5 ANSWER 4 OF 71 MEDLINE on STN
AN 2000064894 MEDLINE
DN 20064894 PubMed ID: 10598024
TI Suppressive effects of Hochu-ekki-to, a traditional Chinese medicine, on IgE production and histamine release in mice immunized with ovalbumin.
AU Suzuki T; Takano I; Nagai F; Fujitani T; Ushiyama K; Okubo T; Seto T; Ikeda S; Kano I
CS Department of Toxicology, The Tokyo Metropolitan Research Laboratory of Public Health, Japan.
SO BIOLOGICAL AND PHARMACEUTICAL BULLETIN, (1999 Nov) 22 (11) 1180-4. Journal code: 9311984. ISSN: 0918-6158.
CY Japan
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 200001
ED Entered STN: 20000209
Last Updated on STN: 20000209
Entered Medline: 20000131
AB We examined the effects of Bu-Zhong-Yi-Qi-Tang (Japanese name: Hochu-ekki-to, HET), a traditional Chinese medicine, on **IgE** production and histamine release in mice immunized intraperitoneally with a mixture of ovalbumin (OA) and aluminum hydroxide (alum adjuvant). Three groups of mice were orally **administered** 0, 1.7 or 17 mg of HET on day 13 after the first immunization with a mixture of 1 microg OA and 1 mg alum adjuvant. They were again immunized with the same dose of OA plus alum adjuvant on day 14. The immunological changes in mice **treated** with OA alone or OA plus HET were examined, and the following findings were obtained. In the HET-**treated** mice, the elevation of anti-OA **IgE** in serum, and histamine release from basophils in blood, were significantly suppressed. A significant suppression of interleukin-4 (IL-4) secretion and proliferation of splenic lymphocytes in primary culture was also observed. A tendency to suppress the elevation of anti-OA IgG1 in serum and interleukin-2 (IL-2) secretion from splenic lymphocytes was observed in the HET-**treated** mice.

These findings suggest that oral **administration** of HET suppresses **IgE antibody** production and **histamine** release in type I **allergic** reaction in mice immunized with OA plus alum adjuvant; this shows the efficacy of HET in **treating** type I **allergic** diseases, such as asthma.

L5 ANSWER 5 OF 71 MEDLINE on STN
AN 2000054942 MEDLINE
DN 20054942 PubMed ID: 10586124
TI Physiopathology of urticaria.
AU Doutre M
SO EUROPEAN JOURNAL OF DERMATOLOGY, (1999 Dec) 9 (8) 601-5. Ref: 53
Journal code: 9206420. ISSN: 1167-1122.
CY France
DT Editorial
General Review; (REVIEW)
(REVIEW, TUTORIAL)
LA English
FS Priority Journals
EM 200001
ED Entered STN: 20000204
Last Updated on STN: 20000204
Entered Medline: 20000124
AB Urticaria is a common disorder that affects as many of 20% of all people at sometime during their lives. It is a cutaneous reaction pattern for which there are multiple potential causes. Its physiopathology is poorly defined. The vascular changes observed in urticarial lesions can be attributed to the release of mediators: histamine plays an essential role but others mediators, such as serotonin, eicosanoids, kinins, neuropeptides. may also be involved. These mediators are synthetized by mast cells which are the major effector cell type. However, other cells, basophils, mononuclear cells, platelets, endothelial cells have also been implicated. During immediate hypersensitivity reaction, mast cells and basophils are activated by **allergens** through cross linking of cell-surface-bound **IgE**. However, more often than not, these cells are stimulated by non-immunological mechanisms. At present, some data are better understood: in urticaria, there is a late phase reaction which involves cytokines and cell adhesion molecules. Recent work has also demonstrated the role of circulating functional **histamine** - releasing auto **antibodies** that bind to the high affinity **IgE** receptor (FcepsilonRI) or, less commonly, to **IgE**. As the pathophysiological mechanisms responsible for urticaria are better defined, **therapeutic** agents other than H1 histamines, should be available.

L5 ANSWER 6 OF 71 MEDLINE on STN
AN 1999216464 MEDLINE
DN 99216464 PubMed ID: 10200014
TI The human recombinant histamine releasing factor: functional evidence that it does not bind to the IgE molecule.
AU Wantke F; MacGlashan D W; Langdon J M; MacDonald S M
CS Johns Hopkins Asthma & Allergy Center, Baltimore, MD 21224, USA.
NC AI 20253 (NIAID)
AI 32651 (NIAID)
SO JOURNAL OF ALLERGY AND CLINICAL IMMUNOLOGY, (1999 Apr) 103 (4) 642-8.
Journal code: 1275002. ISSN: 0091-6749.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Abridged Index Medicus Journals; Priority Journals
EM 199905
ED Entered STN: 19990517
Last Updated on STN: 19990517
Entered Medline: 19990503

AB BACKGROUND: We have previously shown that the human recombinant histamine releasing factor (HrHRF) caused histamine release from a subset of basophils from donors with **allergy**, and this release seemed to be dependent on the presence of a certain type of **IgE**, termed **IgE+**. **IgE** molecules that did not support HrHRF-induced histamine release were termed **IgE-**. However, subsequently we demonstrated that HrHRF primes anti-**IgE-antibody** -induced **histamine** release from all basophils, irrespective of the type of **IgE** on the cell surface. OBJECTIVE: Because these data suggested that HrHRF does not exert its biologic effects by binding to **IgE**, but rather that it interacted with a surface receptor on the basophil, we wanted to obtain functional evidence that HrHRF did or did not bind to the **IgE** molecule. **METHODS**: The rat basophilic leukemia cell line (RBL-SX38), which has been transfected to express a functional human FcepsilonRI (alpha-, beta-, and gamma-chains of the receptor) in addition to the normal rat FcepsilonRI, was used. The presence of the human FcepsilonRI receptor enables these cells to be sensitized with human **IgE**. Cells were passively sensitized with 1000 ng/mL human **IgE+** or 1000 ng/mL human **IgE-** for 60 minutes at 37 degrees C. Unsensitized cells served as a control. After the cells were washed, 1 x 10(5) cells were stimulated in the presence of 1 mmol/L Ca2+ with 0.1 microg/mL anti-**IgE**, 40 microg/mL HrHRF, or 40 microg/mL mouse recombinant HRF (MrHRF), which has 96% homology to HrHRF. RESULTS: Mean anti-**IgE**-induced histamine release was 33% +/- 15%, and there was no difference between **IgE+** sensitization (32% +/- 12%) and **IgE-** sensitization (34% +/- 18%). However, in contrast to human basophil experiments, neither HrHRF (0% +/- 0%) nor MrHRF (3% +/- 5%) caused histamine release in RBL cells sensitized with **IgE+**. In addition, priming the transfected RBL-SX38 cells or the parental cell line, RBL-2H3 cells, with HrHRF or MrHRF did not increase anti-**IgE**-induced histamine release. CONCLUSION: The results indicate that HrHRF does not bind to **IgE**, either **IgE+** or **IgE-**. Therefore it appears likely that rHRF signals through its own specific receptor, which is not expressed or functional on RBL-SX38 or RBL-2H3 cells, but which seems to be expressed on basophils of atopic and nonatopic donors.

L5 ANSWER 7 OF 71 MEDLINE on STN
AN 1999074858 MEDLINE
DN 99074858 PubMed ID: 9857531
TI [An attempt to block histamine release from basophils granulocytes with antibodies obtained as a result of long-term immunization]. Proba blokowania uwalniania histaminy z granulocytow zasadochlonnych przeciwcialami uzyskanymi w wyniku dlugotrwalej immunizacji bakteriami.
AU Szymaniak L
CS Katedry i Zakladu Mikrobiologii i Immunologii Pomorskiej Akademii Medycznej w Szczecinie.
SO ANNALES ACADEMIAE MEDICAE STETINENSIS, (1998) 44 45-64. Journal code: 7506854. ISSN: 1427-4930.
CY Poland
DT (CLINICAL TRIAL) (CONTROLLED CLINICAL TRIAL) Journal; Article; (JOURNAL ARTICLE)
LA Polish
FS Priority Journals
EM 199903
ED Entered STN: 19990413 Last Updated on STN: 19990413 Entered Medline: 19990326
AB Pathogenetic mechanisms responsible for efficacy of specific immunotherapy still remain to be fully explained. This concerns both desensitization with classic **allergens** and very rarely used specific immunotherapy with bacteria. Microbes can play important role as hypersensitivity factor in some **allergo**-inflammatory processes.

Bacterial products may act as basophil histamine liberators through immunological (**IgE**-mediated) and nonimmunological--particular lectin-sugar way. The aim of study was to verify if histamine release triggered by microbes could be modified (blocked) with specific antibacterial antibodies--taking into consideration both of mechanisms of basophil degranulation. The size of immediate (in healthy persons--Tab. 3, 4) and late as well as delayed (in asthmatic patients--Tab. 8) skin reactivity to examined microorganisms and the degree of basophil histamine release induced with these bacteria were compared. Human basophils were isolated from peripheral blood on Ficoll-Hypaque gradient, next challenged with whole, formalin-killed bacteria and with the same bacteria after incubation with specific and nonspecific sera. To differentiate between **IgE**-dependent and non-immunological mechanisms of histamine release, the **IgE** molecules were removed from the surface of the basophils by exposure to pH 3.6 (stripping). In each experiment **histamine** release induced by anti-**IgE antibodies** was used as control of stripping (Tab. 5, 9). Levels of histamine from the basophils (without and after stripping) incubated with non-coated and specific antibodies coated bacteria were compared. The results were expressed as a percentage of total histamine content in the sample. Histamine release was assayed spectrofluorometrically by using Shore **method** in Norn modification. The main investigations concerned the basophils from 12 healthy, non-atopic individuals, who had positive immediate skin reactions with at least 1 from 3 microbial strains: Staphylococcus aureus 9615 (unencapsulated), Staphylococcus aureus Smith (encapsulated) and Escherichia coli. Sera containing specific antibodies for these microorganisms were obtained from immunized rabbits. As negative control served sera collected from animals after immunization. Additionally the basophils of 6 asthmatic (intrinsic asthma) patients **treated** with autovaccines were examined. All patients demonstrated positive late and delayed skin reactions, 3 of them also immediate, to autologous Neisseria and Moraxella species cultured from upper respiratory tract. The bacteria were used as a component of autovaccine and as a basophils stimulating factor in histamine assay. Microbes were incubated with patients own sera before (unspecific serum) and after **treatment** (source of "specific" antibodies).
CONCLUSIONS: 1. Bacteria induced basophil histamine release through two ways: immunological (**IgE**-mediated) and non-immunological (sugar-lectin interactions). 2. Non-immunological interactions played the main role in basophil histamine release induced by bacteria--both in normal individuals and asthmatic patients. 3. Sera of immunized with bacteria animals partially reduced basophil histamine release induced by homologous strains (Tab. 7). 4. An incubation of autologous bacterial strains with asthmatic patients's sera collected after autovaccines **treatment** has no influence on basophil histamine release induced by these microbes (Tab. 9). 5. There was no correlation between the skin reactivity to bacteria (both in healthy persons and in asthmatic patients) and the intensity of basophil histamine release induced by microbes.

L5 ANSWER 8 OF 71 MEDLINE on STN
AN 1998160388 MEDLINE
DN 98160388 PubMed ID: 9500752
TI Identification of common allergenic structures in mugwort and ragweed pollen.
AU Hirschwehr R; Heppner C; Spitzauer S; Sperr W R; Valent P; Berger U; Horak F; Jager S; Kraft D; Valenta R
CS Institute of General and Experimental Pathology, AKH, University of Vienna, Austria.
SO JOURNAL OF ALLERGY AND CLINICAL IMMUNOLOGY, (1998 Feb) 101 (2 Pt 1) 196-206.
Journal code: 1275002. ISSN: 0091-6749.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English

FS Abridged Index Medicus Journals; Priority Journals
EM 199803
ED Entered STN: 19980407
Last Updated on STN: 19980407
Entered Medline: 19980323
AB Identification of common **allergenic** structures in mugwort and ragweed pollen. BACKGROUND: Despite the rare occurrence of ragweed in Middle Europe, a surprisingly high number of patients **allergic** to mugwort, a frequently encountered weed, display **IgE** reactivity against ragweed pollen **allergens**. OBJECTIVE: The aim of this study was to investigate whether the high prevalence of **IgE** reactivity against ragweed in patients **allergic** to mugwort is caused by the presence of common **allergenic** determinants. We also sought to characterize any cross-reactive **allergens**. **METHODS**: Common **allergenic** structures in mugwort and ragweed pollen were characterized by qualitative **IgE** immunoblot inhibition experiments performed with natural **allergen** extracts and recombinant **allergens**. The degree of cross-reactivity was estimated by quantitative CAP-FEIA competitions. The clinical significance of cross-reactive **IgE** **antibodies** was studied with **histamine** release experiments and nasal provocation tests. RESULTS: Mugwort and ragweed RAST values were significantly correlated in a population of 82 Austrian patients **allergic** to mugwort. **IgE** antibodies cross-reacted with **allergens** of comparable molecular weight that were present in both extracts. By using recombinant birch profilin and specific antisera for **IgE** inhibition experiments, profilin was identified as one of the cross-reactive components in mugwort and ragweed pollen. Preincubation of sera from patients **allergic** to mugwort with mugwort extract inhibited **IgE** binding to ragweed pollen extract greater than 80%. Mugwort and ragweed pollen extract induced comparable histamine release and reduction of nasal air flow in a patient with **IgE** reactivity against the major mugwort **allergen** Art v 1. CONCLUSION: In addition to profilin, mugwort and ragweed pollen contain a number of cross-reactive **allergens**, among them the major mugwort **allergen** Art v 1. Cross-reactive **IgE** antibodies can lead to clinically significant **allergic** reactions.

L5 ANSWER 9 OF 71 MEDLINE on STN
AN 96129519 MEDLINE
DN 96129519 PubMed ID: 8574438
TI Reliability of histamine release test in dust mite allergy: influence of the degree of sensitization.
AU Resano A; Prieto I; Sanz M L; Oehling A
CS Department of Allergology and Clinical Immunology, Faculty of Medicine, University of Navarra, Pamplona, Spain.
SO JOURNAL OF INVESTIGATIONAL ALLERGOLOGY AND CLINICAL IMMUNOLOGY, (1995 Sep-Oct) 5 (5) 289-93.
Journal code: 9107858. ISSN: 1018-9068.
CY Spain
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199603
ED Entered STN: 19960321
Last Updated on STN: 19960321
Entered Medline: 19960314
AB The histamine release test has been proven to be a very useful **method** for in vitro diagnosis of **IgE**-mediated **allergy** to inhalant and food **allergens**, as well as for the immunotherapy follow-up of the **allergic** patient. The aim of the present study was to assess the influence of the degree of sensitization in **allergic** patients sensitive to Dermatophagoides

pteronyssinus on their dose-response curves in histamine release tests. To achieve this aim, we studied 109 D. pteronyssinus **allergic** patients and 25 healthy control subjects. Intracutaneous skin test, D. pteronyssinus-specific and total **IgE** quantitations, and histamine release tests were carried out in all the patients. In the case of the histamine release test, five D. pteronyssinus extract concentrations were used (2822.5, 282.25, 28.22, 2.82 and 0.28 UBE/ml), and two patterns of histamine release in sensitive patients were found: one with maximal histamine release at the highest antigen concentration (group I) and the other with maximal release attained at lower concentrations (group II). A sensitization score was designed, after the results from specific **IgE** and intracutaneous skin tests. There were significant differences ($p < 0.05$) in antigen-specific and total **IgE** levels, and in papule diameters and sensitization scores, between the control group and groups I and II. Both groups showed significantly higher ($p < 0.05$) histamine releases than the control group in response to anti-**IgE** antibodies. When stimulating the cells with anti-**IgE antibodies**, **histamine** release in group II was higher than in group I, although this difference was not significant. Finally, the best correlation between sensitization score and antigen-specific histamine release was found at the 2.82 UBE/ml concentration ($r = 0.84$, $p < 0.001$).

L5 ANSWER 10 OF 71 MEDLINE on STN
AN 95052203 MEDLINE
DN 95052203 PubMed ID: 7525679
TI Passive transfer of cutaneous mosquito-bite hypersensitivity by IgE anti-saliva antibodies.
AU Reunala T; Brummer-Korvenkontio H; Rasanen L; Francois G; Palosuo T
CS Department of Dermatology, Helsinki University Hospital, Finland.
SO JOURNAL OF ALLERGY AND CLINICAL IMMUNOLOGY, (1994 Nov) 94 (5) 902-6. Journal code: 1275002. ISSN: 0091-6749.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Abridged Index Medicus Journals; Priority Journals
EM 199412
ED Entered STN: 19950110
Last Updated on STN: 19960129
Entered Medline: 19941209
AB BACKGROUND: Mosquito bites frequently cause cutaneous wheal and flare reactions, and recent immunoblotting studies have shown specific anti-saliva **IgE** antibodies in many persons who have such reactions. OBJECTIVE: The study was designed to show that human serum containing mosquito saliva-specific **IgE antibodies** can produce **histamine** release in vitro and whealing in vivo. **METHODS**: Two mosquito bite-tolerant subjects had bite challenges and Prausnitz-Kustner tests with heated and unheated serum from one patient with Aedes mosquito **allergy**. Immunoblotting and basophil histamine release tests were performed with the patient's and subjects' sera. RESULTS: Both mosquito bite-tolerant subjects had positive Prausnitz-Kustner reactions, which indicated a successful transfer of cutaneous mosquito hypersensitivity. The ordinary and passive basophil histamine release tests also produced positive results with Aedes communis antigens. CONCLUSION: The results of the Prausnitz-Kustner test, immunoblotting, and basophil histamine release tests are consistent with the hypothesis that mosquito bite whealing is mediated by specific anti-saliva **IgE** antibodies.

L5 ANSWER 11 OF 71 MEDLINE on STN
AN 92381596 MEDLINE
DN 92381596 PubMed ID: 1380985
TI Inhibitory activity of mite IgG4, antibody on antigen-induced histamine release from human peripheral blood leukocytes.

AU Yamakoshi T
CS Department of Otorhinolaryngology, Chiba University School of Medicine.
SO NIPPON JIBIINKOKA GAKKAI KAIHO [JOURNAL OF THE OTO-RHINO-LARYNGOLOGICAL SOCIETY OF JAPAN], (1992 Jul) 95 (7) 996-1004.
Journal code: 7505728. ISSN: 0030-6622.
CY Japan
DT Journal; Article; (JOURNAL ARTICLE)
LA Japanese
FS Priority Journals
EM 199209
ED Entered STN: 19921018
Last Updated on STN: 19960129
Entered Medline: 19920929
AB Several reports have yielded conflicting results on the role of IgG4 antibody on the surfaces of target cells in immediate type **allergy**. This study was performed to elucidate whether IgG4 **antibody** inhibits **IgE**-mediated **histamine** release from target cells after antigenic stimulation, and whether it has reaginic activity. Serum was obtained from patients with nasal **allergy** receiving specific immunotherapy for housedust and mites. **IgE** and IgG4 were enriched affinity chromatographically using monoclonal antibodies to **IgE** and IgG4, respectively, from the pooled sera. Both fraction revealed high antibody activity to Dermatophagoides Farinae antigen. Peripheral blood leukocytes from three non-**allergic** donors were passively sensitized with 100 or 300 micrograms of IgG4 according to the **method** of Levy and Osler with a slight modification. Minimal or no histamine release was observed from leukocytes after challenge with both mite antigen and anti-IgG4 monoclonal antibodies. Furthermore, to investigate the reaginic activity of IgG4, leukocytes from patients with nasal **allergy** were stimulated with anti-IgG4 antibodies. The leukocytes of only three out of twenty patients released up to 10% histamine regardless of the IgG4 concentration, while the other patients' leukocytes released minimal amounts of histamine. Two of the three above-mentioned non-**allergic** donors were passively sensitized with 100 or 300 micrograms of IgG4 either one hour after sensitization with 100 ngs of **IgE** or simultaneously with the same amount of **IgE**. After sensitization with 100 ngs of **IgE**, one showed high-grade histamine release after challenge with 0.5 micrograms/ml mite antigen and the other showed middle-grade release with 0.1 micrograms/ml mite. With the presence of 300 micrograms of IgG4, histamine release was significantly inhibited in both donors regardless of the manner of sensitization.(ABSTRACT TRUNCATED AT 250 WORDS)

L5 ANSWER 12 OF 71 MEDLINE on STN
AN 92291514 MEDLINE
DN 92291514 PubMed ID: 1376345
TI Anti-human IgG causes basophil histamine release by acting on IgG-IgE complexes bound to IgE receptors.
AU Lichtenstein L M; Kagey-Sobotka A; White J M; Hamilton R G
CS Department of Medicine, Johns Hopkins University School of Medicine, Baltimore, MD 21224.
NC AI07290 (NIAID)
SO JOURNAL OF IMMUNOLOGY, (1992 Jun 15) 148 (12) 3929-36.
Journal code: 2985117R. ISSN: 0022-1767.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Abridged Index Medicus Journals; Priority Journals
EM 199207
ED Entered STN: 19920724
Last Updated on STN: 19970203
Entered Medline: 19920710
AB We have reexamined the ability of anti-human IgG **antibodies** to induce **histamine** release from human basophils. A panel of

purified murine mAbs with International Union of Immunological Societies-documented specificity for each of the four subclasses of human IgG was used. Of the 24 **allergic** subjects studied, the basophils of 75% (18/24) released greater than 10% histamine to one or more anti-IgG1-4 mAb, whereas none of the 13 nonatopic donor's basophils released histamine after stimulation with optimal amounts of anti-IgG mAb. The basophils of 85% (11/13) of the nonatopic donors did respond to anti-**IgE** challenge, as did 92% (22/24) of the atopic donor cells. Histamine release was induced most frequently by anti-IgG3, and 10/18 anti-IgG responder cells released histamine with mAb specific for two or more different subclass specificities. The rank order for induction of histamine release was anti-IgG3 greater than anti-IgG2 greater than IgG1 greater than anti-IgG4. As in our previous study using polyclonal anti-IgG, 100- to 300-micrograms/ml quantities of the anti-IgG mAb were required for maximal histamine release, about 1000-fold higher than those for comparable release with anti-human **IgE**. Specificity studies using both immunoassays and inhibition studies with **IgE** myeloma protein indicated that anti-IgG induced histamine release was not caused by cross-reactivity with **IgE**. Ig receptors were opened by lactic acid **treatment** so that the cells could be passively sensitized. Neither **IgE** myeloma nor IgG myeloma (up to 15 mg/ml) proteins could restore the response to anti-IgG mAb. However, sera from individuals with leukocytes that released histamine upon challenge with anti-IgG mAb could passively sensitize acid-**treated** leukocytes from both anti-IgG responder and nonresponder donors for an anti-IgG response. The only anti-IgG mAb that induced release from these passively sensitized cells were those to which the serum donor was responsive. Sera from non-IgG responders could not restore an anti-IgG response. These data led to the hypothesis that the IgG specific mAb were binding to IgG-**IgE** complexes that were attached to the basophil through **IgE** bound to the **IgE** receptor. This was shown to be correct because passive sensitization to anti-IgG could be blocked by previous exposure of the basophils to **IgE**. We conclude that anti-IgG-induced release occurs as a result of binding to IgG anti-**IgE** antibodies and cross-linking of the **IgE** receptors on basophils.

L5 ANSWER 13 OF 71 MEDLINE on STN
AN 91058243 MEDLINE
DN 91058243 PubMed ID: 1700888
TI Passive sensitization and histamine release of basophils. IgE and cellular factors regulating histamine release.
AU Nolte H; Poulsen M; Schiotz P O; Skov P S
CS Department of Pediatrics, University Hospital of Aarhus, Denmark.
SO ALLERGY, (1990 Aug) 45 (6) 427-35.
Journal code: 7804028. ISSN: 0105-4538.
CY Denmark
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199101
ED Entered STN: 19910222
Last Updated on STN: 19960129
Entered Medline: 19910102
AB This study had two purposes. First, to examine a possible functional heterogeneity of **IgE** regulating basophil histamine release and the effect of using two different donor cells for passive sensitization experiments. Second, to investigate basophils not releasing histamine to anti-**IgE** by stimulating protein kinase C with the addition of the phorbol-ester, TPA. In consecutive experiments responding donor basophils were passively sensitized with plasma from non-responding subjects. Thus, the first set of experiments included passive sensitization of acid **treated** donor basophils from one atopic and one non-atopic patient with plasma from 29 children with exogenous

asthma to grass pollen, cat dander, or dust mites. Different secretagogues (anti-**IgE**, Concanavalin A, and N-formyl-methionyl-leucyl-phenylalanine) induced different histamine release responses due to a cellular property of the basophils not related to the type of **IgE** bound to the cell membrane. It was demonstrated that the **allergen**-induced histamine release did not depend on the extract or type of **IgE** when the biological activity of each extract and serum-specific **IgE** levels were similar. However, the atopic donor cells released significantly (P less than 0.05) more histamine than non-atopic donor cells. Thus, histamine release depends on the type of secretagogues and a cellular property which is maybe influenced by the presence of serum factors and a certain type of **IgE** in the serum of atopics. The second set of experiments included 10 patients (6 atopics and 4 non-atopics) with non-histamine releasing basophils. In the presence of 10 ng/ml TPA, however, seven of 10 patients released histamine at anti-**IgE** challenge. Three months later two additional patients became responsive in the presence of TPA. By passive sensitization of responding donor basophils the non-responding patients were shown to possess functionally intact **IgE**. Thus, the discrepancies sometimes observed between clinical symptoms, serological **IgE-antibody** measurements and **histamine** release testing in **allergic** patients may be related to a cellular property of basophils.

L5 ANSWER 14 OF 71 MEDLINE on STN
AN 90196534 MEDLINE
DN 90196534 PubMed ID: 1690523
TI Hyposensitization in asthmatics with mPEG-modified and unmodified house dust mite extract. III. Effect on mite-specific immunological parameters and correlation to changes in mite-sensitivity and symptoms.
AU Mosbech H; Djurup R; Dreborg S; Kaergaard Poulsen L; Stahl Skov P; Steringer I
CS Medical Dept., State University Hospital, Copenhagen, Denmark.
SO ALLERGY, (1990 Feb) 45 (2) 130-41.
Journal code: 7804028. ISSN: 0105-4538.
CY Denmark
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199004
ED Entered STN: 19900601
Last Updated on STN: 19960129
Entered Medline: 19900425
AB Forty-six adult asthmatics **allergic** to D. pteronyssinus (Dp) participated in a 2-year study. Thirty-one underwent hyposensitization (HS-group). Fifteen were **treated** with Dp-extract (Dp-group), and 16 with a similar extract modified by monomethoxypolyethylene glycol with reduced **allergenicity** (mPEG-Dp-group). Fifteen patients served as controls. Dp-specific **antibodies** and **histamine** release from blood basophils were determined and compared with Dp-sensitivity in lungs and skin. In addition, IgG and **IgE** against the major **allergen** Der p I were followed in a subgroup. Dp-specific IgG, IgG1, and IgG4 increased significantly in both HS-**treated** groups after 1 and 2 years (median: 2.5- to 11.6-fold). IgG4 was not induced if maintenance dose during the first year was less than 20,000 BU. Median skin sensitivity decreased 4.4- to 8.2-fold after 1 year and 7.4- to 21.4-fold after 2 years. Der p I specific IgG response was unrelated to the occurrence or change in **IgE** with the same specificity. The mPEG-Dp-extract tended to have less effect on skin sensitivity and immunological parameters, differences reaching statistical significance for skin sensitivity only. In the HS-group, the decrease in bronchial sensitivity was significantly correlated to a decrease in **IgE** (r = 0.36), IgG1/IgG4 (r = 0.49), Dp-specific histamine release (r = 0.58), and to an increase in

Dp-specific IgG4 (r = -0.36) and IgG4/**IgE** (r = -0.48). In patients improving clinically, Dp-specific IgG4/**IgE** increased, and median Dp-specific **IgE** was reduced to 80% compared with an increase to 150-160% seen in the unchanged or deteriorated group (P less than 0.05). Findings indicate an improvement of effect, if the **allergen** dose is sufficient to reduce specific **IgE** and/or induce an IgG and especially IgG4 response.

L5 ANSWER 15 OF 71 MEDLINE on STN
AN 90107739 MEDLINE
DN 90107739 PubMed ID: 2691224
TI [Rubber gloves and condoms cause immediate hypersensitivity]. Kumikasineiden ja kondomin aiheuttama valiton yliherkkyys.
AU Turjanmaa K
SO DUODECIM, (1989) 105 (23-24) 1905-8. Ref: 17
Journal code: 0373207. ISSN: 0012-7183.
Report No.: PIP-061823; POP-00224169.
CY Finland
DT Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, TUTORIAL)
LA Finnish
FS Priority Journals; Population
EM 199002
ED Entered STN: 19900328
Last Updated on STN: 20021101
Entered Medline: 19900222
AB Surgical gloves, condoms, and air balloons made of natural rubber or latex contain approximately 2% protein. With the use of instruments made of rubber, reddening, urticaria, itching, and, in extreme cases, anaphylactic reaction can occur. Milder symptoms disappear within 1/2-2 hours without intervention. In the past 5 years, 100 such cases have been reports, 50% from Finland and Sweden. During testing of hospital personnel, 15 out of 512 people developed urticaria caused by the latex content of surgical gloves. According to Finnish data, another 24% of those **allergic** to gloves got similar urticaria or itching from using condoms. There was a US report of a case of anaphylactic reaction caused by the condom. The sensitivity test can be based on the determination of immunoglobulin E (**IgE**) **antibody** or on the determination of **histamine** release. The reliability of the former is 60% and that of the latter 94%. The symptoms are **treatable**, but it is best to avoid contact with materials containing latex; in surgical practice it is advisable to use gloves made of artificial rubber, such as Elastyren or Dermaprene.

L5 ANSWER 16 OF 71 MEDLINE on STN
AN 90003911 MEDLINE
DN 90003911 PubMed ID: 2477183
TI Immune mechanisms in allergen-specific immunotherapy.
AU Rocklin R E
CS Boehringer Ingelheim Pharmaceuticals, Ridgefield, Connecticut 06877.
SO CLINICAL IMMUNOLOGY AND IMMUNOPATHOLOGY, (1989 Nov) 53 (2 Pt 2) S119-31.
Ref: 39
Journal code: 0356637. ISSN: 0090-1229.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, TUTORIAL)
LA English
FS Priority Journals
EM 198911
ED Entered STN: 19900328
Last Updated on STN: 19960129
Entered Medline: 19891122

AB **Allergen**-specific immunotherapy has been shown to be clinically effective in patients with seasonal **allergic** rhinitis and/or asthma. Patients who receive this **therapy** undergo a number of specific immunologic changes in response to the **allergen** being **administered**. These include a "blunting" of the seasonal rise of **allergen**-specific **IgE** as well as lowering baseline **IgE** levels, generation of an **allergen**-specific IgG response, development of auto-anti-idiotypic **antibodies**, reduced basophil **histamine** release in response to **allergen**, decreased lymphocyte proliferation, lymphokine production in response to **allergen**, and the generation of **allergen**-specific suppressor T cells that down-regulate lymphoproliferative responses and **IgE** synthesis. The mechanism by which **allergen**-specific immunotherapy produces clinical efficacy is not known. Recent evidence suggests that the development of immunoregulatory responses (suppressor T cells and anti-idiotypic antibodies) during immunotherapy may account for the immunologic changes described above but as yet have not been correlated with clinical outcome. Identification of epitopes on **allergens** that can induce selective T helper/suppressor responses may provide opportunities for producing immunological tolerance and a reduction in the **allergic** diathesis.

L5 ANSWER 17 OF 71 MEDLINE on STN
AN 89054968 MEDLINE
DN 89054968 PubMed ID: 3057092
TI Immunological response to immunotherapy for immediate hypersensitivity: clinical relevance.
AU Tamir R; Pick A I
CS Division of Clinical Immunology and Allergy, Beilinson Medical Center, Petach Tikvah, Israel.
SO IMMUNOLOGIC RESEARCH, (1988) 7 (3) 256-64. Ref: 57
Journal code: 8611087. ISSN: 0257-277X.
CY Switzerland
DT Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, TUTORIAL)
LA English
FS Priority Journals
EM 198812
ED Entered STN: 19900308
Last Updated on STN: 19900308
Entered Medline: 19881230
AB Immunotherapy, also called desensitization, is effective in **treating allergic** rhinitis, insect sting venom hypersensitivity and probably **allergic** asthma. **Administration** of gradually increasing doses of the sensitizing antigen induces several immunological changes. The humoral responses include an increase in specific IgG titer, a decrease in specific **IgE** titer with blunting of its seasonal rise, and an increase in the specific anti-idiotype antibody titer. Cellular changes include diminished responsiveness of the patient's lymphocytes to stimulation by **allergen** as measured by thymidine incorporation. This is accounted for by the generation of suppressor cells specific for the **allergen**. These suppressor cells also induce suppression of **IgE** production by mononuclear cells. An additional effect that is attributed to IT is a decrease in basophil sensitivity to the **allergen** as measured by histamine release. The clinical correlates of these changes are not clear. Currently, none of the responses can be used as a tool for assessing the response in the **treated** individual patient. Although the increase in specific IgG was shown to correlate with the clinical response in patient groups, it is not applicable to the individual patient. Currently the best parameter for assessing clinical response is probably the increase in the ratio between the specific IgG and the specific **IgE**. However further

studies are warranted to evaluate the significance of the change in anti-idiotype **antibodies**, basophil **histamine** release and perhaps immunological changes yet to be discovered.

L5 ANSWER 18 OF 71 MEDLINE on STN
AN 89022692 MEDLINE
DN 89022692 PubMed ID: 2459947
TI Diagnosis of allergy to peach. A comparative study of "in vivo" and "in vitro" techniques.
AU Malet A; Sanosa J; Garcia-Calderon P A
CS Inmunolab, Barcelona, Spain.
SO ALLERGOLOGIA ET IMMUNOPATHOLOGIA, (1988 May-Jun) 16 (3) 181-4.
Journal code: 0370073. ISSN: 0301-0546.
CY Spain
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 198811
ED Entered STN: 19900308
Last Updated on STN: 19960129
Entered Medline: 19881101
AB In our particular Mediterranean region, extensive plantations of peach trees (prunus persica) give rise to processes of peach hypersensitivity. This datum together with the scarcity of literature and the use of disparate **methods** of diagnosis prompted us to select the peach as an example of hypersensitivity to a fruit, and to examine the clinical symptoms, skin tests, specific **IgE antibodies** (RASTR) and **histamine** release in a group of 25 patients with peach **allergy**. The results showed a good concordance between clinical history and skin tests (78%) and between RASTR (82%) and histamine release (74%) when comparison was made with the clinical history. The concordance between skin tests and RASTR histamine release was 94%. On the application of a statistical study to the different data collected, and on analysing all the concordances and possible combinations between "in vivo" and "in vitro" tests, the skin tests were not found to be superior to the RASTR (p less than 0.001) or to the histamine release test (p less than 0.001), in terms of peach **allergy** diagnosis. Both the RASTR and the histamine release test were found to be equally valid (p less than 0.001) in "in vitro" peach diagnosis. These findings demonstrate the perfect and complete diagnosis of peach **allergy** with the methodology used.

L5 ANSWER 19 OF 71 MEDLINE on STN
AN 86212977 MEDLINE
DN 86212977 PubMed ID: 3518527
TI A double-blind, multicenter immunotherapy trial in children, using a purified and standardized Cladosporium herbarum preparation. II. In vitro results.
AU Karlsson R; Agrell B; Dreborg S; Foucard T; Kjellman N I; Koivikko A; Einarsson R
SO ALLERGY, (1986 Feb) 41 (2) 141-50.
Journal code: 7804028. ISSN: 0105-4538.
CY Denmark
DT (CLINICAL TRIAL)
(CONTROLLED CLINICAL TRIAL)
Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 198606
ED Entered STN: 19900321
Last Updated on STN: 19990129
Entered Medline: 19860606
AB This double-blind immunotherapy trial in children, using a purified and standardized Cladosporium herbarum **allergen** preparation, has

shown that children with mould asthma and/or rhinoconjunctivitis, responded to immunotherapy with a decrease in specific **IgE** and a significant increase in specific IgG. There was a marked increase in the ratio specific IgG/specific **IgE** as a result of active **treatment**. **IgE**-CRIE radiostaining patterns showed no pronounced changes after 10 months' active **treatment** and no "new sensitivities" could be detected in the studied patients. IgG-CRIE radiostaining, primarily directed towards the important **allergens**, was significantly increased in the active group and particularly towards Ag-12 (partially identical to a previously described major **allergen** in Cladosporium herbarum, Ag-54). Children **treated** with **histamine** placebo showed no change in **antibody** patterns during 10 months of **treatment**.

L5 ANSWER 20 OF 71 MEDLINE on STN
AN 85233461 MEDLINE
DN 85233461 PubMed ID: 2409028
TI Assessment of histamine release and kinin formation in man: identification of kinin degradation products and characterization of a lymphocyte-dependent histamine releasing factor.
AU Kaplan A P; Sheikh I; Frendscho M H
SO INTERNATIONAL ARCHIVES OF ALLERGY AND APPLIED IMMUNOLOGY, (1985) 77 (1-2) 64-8.
Journal code: 0404561. ISSN: 0020-5915.
CY Switzerland
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 198507
ED Entered STN: 19900320
Last Updated on STN: 19900320
Entered Medline: 19850729
AB Factors traditionally associated with **histamine** release include **IgE antibody** plus antigen and the anaphylatoxins C3a, C4a, and C5a. Yet histamine release is thought to occur in disorders such as chronic urticaria, atopic dermatitis, and contact dermatitis in which the above mechanisms do not appear operative. We have partially purified a factor from stimulated human mononuclear cells which causes basophil histamine release. It is homogeneous by gel filtration with a molecular weight of about 35,000 daltons and has two molecular forms when assessed by ion exchange chromatography, isoelectrofocusing in gels and chromatofocusing. The purified material, when radiolabeled, gives a single band upon two-dimensional gel electrophoresis and radioautography. This factor may therefore represent one mechanism in which delayed hypersensitivity and histamine release are linked. We are also developing **methods** to better assess the kinin-forming system in **allergic** diseases. Assays for enzyme inhibitor complexes are the most sensitive and specific **methods** for inferring activation in plasma. These include quantitation of activated Hageman factor-C1 INH complexes and kallikrein-C1 INH complexes each of which appears elevated in cutaneous late-phase reactions. However, bradykinin assessment is fraught with difficulties including spurious generation and rapid inactivation. Using high performance liquid chromatography we have separated bradykinin from kallidin, des-Arg9-bradykinin (the degradation product of carboxypeptidase N) as well as the fragments Arg-Pro-Pro-Gly-Phe, Ser-Pro, and Phe-Arg, the degradation products formed by angiotensin-converting enzyme. These can be assayed in purified mixtures, can be detected upon addition of bradykinin to human plasma and are formed by kaolin **treatment** of plasma.

L5 ANSWER 21 OF 71 MEDLINE on STN
AN 85223267 MEDLINE
DN 85223267 PubMed ID: 2408509
TI Role of IgE in anaphylactoid reactions during anaesthesia.

AU Fisher M M; Baldo B A
SO ANNALES FRANCAISES D ANESTHESIE ET DE REANIMATION, (1985) 4 (2) 133-6.
Journal code: 8213275. ISSN: 0750-7658.
CY France
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 198507
ED Entered STN: 19900320
Last Updated on STN: 19900320
Entered Medline: 19850711
AB As diagnostic **methods** of detecting drug-specific **IgE** antibodies become more sophisticated, the evidence implicating specific **IgE** in anaesthetic **allergy** has increased. To implicate **IgE** in reactions, a history resembling anaphylaxis, the demonstration of drug-specific histamine release by intradermal testing and the demonstration of specific antibodies are necessary. Such evidence is seen in 70% of muscle relaxant reactors. Basophil histamine release studies suggest that histamine release is **allergen**-induced, not direct, and the final evidence necessary is to demonstrate the role of drug-specific **antibodies** in such **histamine** release.

L5 ANSWER 22 OF 71 MEDLINE on STN
AN 85196674 MEDLINE
DN 85196674 PubMed ID: 2581467
TI Effects of long-term treatment with low dose cimetidine on allergen-induced airway responses and selected immunological parameters in atopic asthmatics.
AU Bergstrand H; Hegardt B; Lowhagen O; Strannegard O; Svedmyr N
SO ALLERGY, (1985 Apr) 40 (3) 187-97.
Journal code: 7804028. ISSN: 0105-4538.
CY Denmark
DT (CLINICAL TRIAL)
(CONTROLLED CLINICAL TRIAL)
Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 198505
ED Entered STN: 19900320
Last Updated on STN: 19970203
Entered Medline: 19850529
AB Twenty asymptomatic atopic asthmatics were **treated** with either cimetidine 100 mg orally (13 patients) or placebo (7 patients) once a day for 4 weeks. Bronchial challenges were performed with the pertinent **allergen** immediately before and 2 and 4 weeks after the initiation of **treatment** and, finally, 4 weeks after the cessation of **treatment**. Before each challenge blood was drawn for the determination of specific **IgE** antibody levels (RAST procedure) and total **IgE** (PRIST), **allergen**- and anti-**IgE** -induced basophil histamine release, and mitogen-induced lymphocyte (3H)-thymidine incorporation. Patients **treated** with cimetidine were found to be significantly (P less than 0.05) less responsive to bronchial **allergen** challenge during the **treatment** than before it; patients **treated** with placebo were more reactive (P less than 0.05) 14 days after the initiation of **treatment**. The difference in responsiveness to **treatment** between the placebo and the cimetidine groups was significant 14 days (P less than 0.01) and 4 weeks (P less than 0.05) after the initiation of **treatment**; no significant difference in **allergen** responsiveness was recorded between the groups 1 month after cessation of **treatment**. No clear-cut changes in specific **IgE antibody** or total **IgE** levels, **histamine** release capacity, or mitogen-induced lymphocyte responsiveness were observed in either group, except that lymphocytes from cimetidine-**treated** patients tended

to show an increased ratio of PHA- to PMA-induced thymidine incorporation. Thus, it was found that the **treatment** of asymptomatic atopic asthmatics with low-dose cimetidine reduced their **allergen** sensitivity in bronchial provocation tests by a mechanism which remains to be elucidated.

L5 ANSWER 23 OF 71 MEDLINE on STN
AN 84004890 MEDLINE
DN 84004890 PubMed ID: 6193994
TI Anti-allergic effect of beta-2 agonists and cholinoceptor antagonists in vitro.
AU Morr H
SO EUROPEAN JOURNAL OF RESPIRATORY DISEASES. SUPPLEMENT, (1983) 128 (Pt 1) 40-3.
Journal code: 8010618. ISSN: 0106-4347.
CY Denmark
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 198311
ED Entered STN: 19900319
Last Updated on STN: 19900319
Entered Medline: 19831123
AB Human lung tissue passively sensitized with anti-grass pollen **IgE** **antibodies** releases **histamine** upon exposure to specific grass pollen antigen. Beta-sympathomimetic agents inhibit the antigen-induced release of histamine, thus beta-sympathomimetic drugs might exhibit a combination of prophylactic and direct bronchodilating properties in the **treatment** of **allergic** bronchial asthma. The anticholinergic agent ipratropium bromide had no direct effect on the immunologically induced release of histamine. Acetylcholine increased the antigen-induced release of histamine significantly. This enhanced release was almost completely inhibited by ipratropium bromide as a result of competitive inhibition. This mode of action may add to the usefulness of anticholinergic agents in vagus-controlled chronic obstructive ventilatory disorders.

L5 ANSWER 24 OF 71 MEDLINE on STN
AN 83295244 MEDLINE
DN 83295244 PubMed ID: 6193304
TI Anti-allergic action of glucocorticoids in rats.
AU Nagai H; Takizawa T; Nakatomi I; Matsuura N; Koda A
SO JAPANESE JOURNAL OF PHARMACOLOGY, (1983 Apr) 33 (2) 349-55.
Journal code: 2983305R. ISSN: 0021-5198.
CY Japan
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 198310
ED Entered STN: 19900319
Last Updated on STN: 19900319
Entered Medline: 19831028
AB The effects of three glucocorticoids (steroids: hydrocortisone, prednisolone and dexamethasone) on **IgE** antibody-mediated immediate hypersensitivity reactions in rats were studied. Forty-eight hr homologous passive cutaneous anaphylaxis (PCA) was inhibited in a dose response manner by the **administration** of steroids 2 hr prior to challenge. When steroids were **administered** at various times before challenge, each steroid showed different patterns of time courses for inhibition of homologous PCA. Maximum inhibition was obtained 2 hr after the **administration** of each steroid. The **IgE** **antibody**-mediated **histamine** release from peritoneal mast cells in vivo was inhibited by the **administration** of steroids. Time-courses for the inhibitory effects of steroids on histamine release

were slightly different from those in PCA. The increase of capillary permeability caused by histamine, serotonin, trypsin or hyaluronidase in the rat skin was not affected by steroids. The inhibitory action of steroids on PCA was not influenced by non-corticoidal steroids (17 alpha-methyltestosterone, androstenedione and progesterone) or arachidonic acid. These results partially explain the inhibitory action of steroids on **IgE** antibody-mediated immediate hypersensitivity. The inhibition of histamine release would contribute towards the anti-**allergic** action of steroids but not the antagonistic effect on the mediators. Also the action of glucocorticoids receptor or the inhibition of arachidonic acid production are not vitally important in connection with the anti-**allergic** action of steroids.

L5 ANSWER 25 OF 71 MEDLINE on STN
AN 82013359 MEDLINE
DN 82013359 PubMed ID: 6116174
TI [Immunotherapy (hypo-/desensitization) in allergic diseases (author's transl)].
Immunotherapie (Hypo-/Desensibilisierung) bei allergischen Erkrankungen.
AU Urbanek R
SO MONATSSCHRIFT KINDERHEILKUNDE, (1981 Jan) 129 (1) 13-7. Ref: 16
Journal code: 8206462. ISSN: 0026-9298.
CY GERMANY, WEST: Germany, Federal Republic of
DT Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
LA German
FS Priority Journals
EM 198111
ED Entered STN: 19900316
Last Updated on STN: 19950206
Entered Medline: 19811122
AB The aim of hyposensitization **therapy** is to achieve an **allergen** tolerance. The solutions for hyposensitization are available as water soluble, semi-depot or depot **allergen** extracts. The strengths of the solutions are given in the following units: PNU (protein nitrogen units), w/v (weight/volume) and HEP (histamine equivalent in pricktesting). A comparison between the units is of limited value, as no information about the immunological potency is possible. Most experience centres on the parenteral **allergen** application, but recently oral hyposensitization has gained ground. The hyposensitization **treatment** can be performed in the conventional manner or in the form of a rapid hyposensitization. The length of **treatment** is at least 2 years. The assessment of the **therapeutic** efficacy of the **treatment** can be achieved by the history of natural **allergen** exposition, provocation tests on the target organs, the course of the **allergen** specific IgG and **IgE antibodies** as well as testing the **histamine** release from leukocytes. Further improved efficacy, shortening of the course of immunisation and the elimination of side effects should be developed.

L5 ANSWER 26 OF 71 MEDLINE on STN
AN 80081089 MEDLINE
DN 80081089 PubMed ID: 92803
TI Immunological release of histamine from human lung. I. Studies on the beta 2-sympathomimetic stimulator fenoterol.
AU Morr H
SO RESPIRATION, (1979) 38 (3) 163-7.
Journal code: 0137356. ISSN: 0025-7931.
CY Switzerland
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 198002

ED Entered STN: 19900315
Last Updated on STN: 19900315
Entered Medline: 19800215
AB Human lung tissue passively sensitized with anti-grass pollen **IgE antibodies** release **histamine** upon exposure to specific grass pollen antigen. Fenoterol, a beta 2-sympathomimetic stimulator drug, is shown to be a potent inhibitor of antigen-induced release of histamine. This inhibitory effect occurred with fenoterol concentrations of 2 x 10(-8) to 1 x 10(-7) M, and was determined by 67 and 95%, respectively. Thus, the beta 2-receptor stimulator fenoterol is a valuable drug for **treating allergic** bronchial asthma since it exhibits a combination of prophylactic and direct **therapeutic** properties.

L5 ANSWER 27 OF 71 MEDLINE on STN
AN 77138694 MEDLINE
DN 77138694 PubMed ID: 844615
TI Allergic responses to airborne allergens and insect venoms.
AU Lichtenstein L M
SO FEDERATION PROCEEDINGS, (1977 Apr) 36 (5) 1727-31.
Journal code: 0372771. ISSN: 0014-9446.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 197705
ED Entered STN: 19900313
Last Updated on STN: 19900313
Entered Medline: 19770520
AB Exposure to environmental **allergens** leads to human sensitization and disease by two different routes: inhalation (i.e., pollen **allergy**) and parenteral **administration** (i.e., insect sting anaphylaxis). In both, the pathogenesis of disease involves specific **IgE** antibodies and mediator release from mast cells and basophils. The relevant **allergens** have been characterized and found to be proteins with a molecular mass that ranges from 15,000 to 40,000 daltons. Appropriate diagnostic **methods**, skin testing, basophil **histamine** release and **IgE antibody** measurements (RAST), have been developed. Appropriate immunotherapy (immunization with the relevant **allergens**) leads to an increase in IgG (blocking) antibody. This **therapy** has proved to be useful in inhalational **allergy** and is potentially curative in parenterally induced anaphylaxis.

L5 ANSWER 28 OF 71 CAPLUS COPYRIGHT 2003 ACS on STN
AN 2003:542999 CAPLUS
TI Effect of Antibodies to Histamine in Ultralow Doses on Production of Allergen-Specific Antibodies
AU Agafonov, V. I.; Bel'skaya, N. V.; Danilets, M. G.; Bel'skii, Yu. B.; Trofimova, E. S.; Dugina, Yu. L.; Epshtein, O. I.
CS Tomsk Research Center, Institute of Pharmacology, Siberian Division of the Russian Academy of Medical Sciences; "Materia Medica Holding" Research-and-Production Company
SO Bulletin of Experimental Biology and Medicine (Translation of Byulleten Eksperimental'noi Biologii i Meditsiny) (2003), 135, 143-145
CODEN: BEXBAN; ISSN: 0007-4888
PB Kluwer Academic/Consultants Bureau
DT Journal
LA English
AB We studied the effects of potentiated **antibodies** to **histamine** on prodn. of **IgE** and IgG1 in response to 3-fold immunization of mice with ovalbumin in doses of 0.5, 10, and 100 mg. The course of **treatment** with **antibodies** to **histamine** suppressed prodn. of **allergen**-specific

IgE and IgG1 in mice 2-fold immunized with ovalbumin in doses of 100 and 0.5 mg, resp. In mice immunized 3 times with ovalbumin in various doses the prepn. suppressed prodn. of **IgE** and IgG1.

L5 ANSWER 29 OF 71 CAPLUS COPYRIGHT 2003 ACS on STN
AN 2003:122039 CAPLUS
DN 138:220278
TI Humoral and cellular responses to gliadin in wheat-dependent, exercise-induced anaphylaxis
AU Lehto, M.; Palosuo, K.; Varjonen, E.; Majuri, M.-L.; Andersson, U.; Reunala, T.; Alenius, H.
CS Finnish Institute of Occupational Health, Helsinki, Finland
SO Clinical and Experimental Allergy (2003), 33(1), 90-95
CODEN: CLEAEN; ISSN: 0954-7894
PB Blackwell Science Ltd.
DT Journal
LA English
AB Background: Wheat-dependent, exercise-induced anaphylaxis (WDEIA) is a severe **allergy** where wheat ingestion together with phys. exercise induces anaphylaxis. We have previously shown that patients with WDEIA have **IgE** antibodies against gliadin proteins and identified .omega.-5 gliadin (Tri a 19) as a major **allergen**. Objective: The aim of this study was to examine gliadin-specific IgG subclass, IgA and **IgE antibodies**, basophil **histamine** release and cell-mediated responses in WDEIA. **Methods**: Sera and peripheral blood mononuclear cells (PBMC) were obtained from patients with WDEIA and from controls without wheat **allergy**. Serum antibodies to crude gliadin ext. (CGE) and purified .omega.-5 gliadin were measured by ELISA and basophil reactivity by histamine-release test. Gliadin-induced cell-mediated responses were assessed by lymphocyte proliferation assay, and cytokine mRNA expression with real-time quant. PCR. Results: All patients with WDEIA, but none of the controls, had **IgE** antibodies to CGE and .omega.-5 gliadin. Both **allergens** released high levels of histamine from the basophils of patients with WDEIA. Levels of IgA antibodies to CGE and .omega.-5 gliadin were significantly elevated in the patients, but the distribution of IgG subclass antibodies showed no statistically significant differences between the two groups. Proliferative responses of PBMC to CGE were increased in patients with WDEIA, and stimulation of PBMC with CGE caused, both in patients and in controls, a clear induction of IL-10 mRNA. Compared with the controls, induction of IL-10 mRNA expression in patients with WDEIA was significantly suppressed. Conclusion: These results suggest that, in addn. to **IgE** antibodies against .omega.-5 gliadin, specific IgA antibodies may be involved in the pathogenesis of WDEIA. Decreased expression of IL-10 mRNA in PBMC during gliadin stimulation may facilitate the development of gliadin-specific T cell responses.
RE.CNT 39 THERE ARE 39 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 30 OF 71 CAPLUS COPYRIGHT 2003 ACS on STN
AN 2002:881322 CAPLUS
DN 138:88520
TI Threshold levels of purified natural Bos d 2 for inducing bronchial airway response in asthmatic patients
AU Zeiler, T.; Taivainen, A.; Mantyjarvi, R.; Tukiainen, H.; Rautiainen, J.; Rytkonen-Nissinen, M.; Virtanen, T.
CS Department of Clinical Microbiology, University of Kuopio, Kuopio, Finland
SO Clinical and Experimental Allergy (2002), 32(10), 1454-1460
CODEN: CLEAEN; ISSN: 0954-7894
PB Blackwell Science Ltd.
DT Journal
LA English
AB Background: Provocation tests are invaluable in establishing threshold

levels and a causal relation between atopic asthma and a certain **allergen** source, esp. in relation to work-assocd. exposure. Purified major **allergens** open possibilities for a more accurate assessment of sensitization. Objective: To det. the threshold dose of purified major bovine dander **allergen** Bos d 2 in bronchial provocation in comparison with the std. **allergen** and a set of other parameters of **allergy**. **Method**: Nine consecutive patients referred to hospital for confirming the bovine origin of their occupational asthma were subjected to bronchial provocation tests with purified natural Bos d 2 and a std. bovine dander **allergen**. Addnl. tests included bronchial histamine challenge, measurements of total **IgE**, specific **IgE** antibody detns. and skin prick tests (SPT) with both **allergens**. Results: In the provocation tests with Bos d 2, a 15% decrease in the forced expiratory vol. in 1 s (FEV1) and/or peak expiratory flow (PEF) values in eight out of nine patients confirmed the predominant role of Bos d 2 in the sensitization. The threshold dose of Bos d 2 varied from 0.1 .mu.g to > 100 .mu.g (median .+-. median abs. deviation = 4.5 .mu.g). A pos. SPT was induced by a median dose of 13.9 .mu.g of Bos d 2. Bronchial response to **histamine** and **IgE antibodies** against Bos d 2 showed the highest correlations to the provocations results. Conclusions: The efficacy of Bos d 2 in bronchial provocation in patients with occupational cattle-assocd. asthma was confirmed and the range of the threshold level was detd. There were individual variations, but the response in provocation remains the ref. **method** for identification of the cause of occupational atopic asthma. SPT and the measurement of specific **IgE** antibodies, preferably with purified or recombinant major **allergens**, increase the accuracy of the diagnosis.

RE.CNT 44 THERE ARE 44 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 31 OF 71 CAPLUS COPYRIGHT 2003 ACS on STN
AN 2001:491170 CAPLUS
DN 135:225757
TI Brain mast cells act as an immune gate to the hypothalamic-pituitary-adrenal axis in dogs
AU Matsumoto, Itsuro; Inoue, Yasuhisa; Shimada, Toshio; Aikawa, Tadaomi
CS Department of Physiology, Nagasaki University School of Medicine, Nagasaki, 852, Japan
SO Journal of Experimental Medicine (2001), 194(1), 71-78
CODEN: JEMEAV; ISSN: 0022-1007
PB Rockefeller University Press
DT Journal
LA English
AB Mast cells perform a significant role in the host defense against parasitic and some bacterial infections. Here the authors show that in the dog, degranulation of brain mast cells evokes hypothalamic-pituitary-adrenal responses via histamine release. A large no. of mast cells were found in a circumscribed ventral region of the hypothalamus, including the pars tuberalis and median eminence. When these intracranial mast cells were passively sensitized with **IgE** via either the intracerebroventricular or i.v. route, there was a marked increase in the adrenal cortisol secretion elicited by a subsequent antigenic challenge (whether this was delivered via the central or peripheral route). Comp.48/80, a mast cell secretagogue, also increased cortisol secretion when **administered** intracerebroventricularly. Pretreatment (intracerebroventricularly) with anti-corticotropin-releasing factor **antibodies** or a **histamine** H1 blocker, but not an H2 blocker, attenuated the evoked increases in cortisol. These data show that in the dog, degranulation of brain mast cells evokes hypothalamic-pituitary-adrenal responses via centrally released histamine and corticotrophin-releasing factor. On the basis of these data, the authors suggest that intracranial mast cells may act as an

allergen sensor, and that the activated adrenocortical response may represent a life-saving host defense reaction to a type I **allergy**.

RE.CNT 44 THERE ARE 44 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 32 OF 71 CAPLUS COPYRIGHT 2003 ACS on STN
AN 2001:331658 CAPLUS
DN 135:342734
TI Immunological mechanism of sneezing
AU Falus, Andras
CS Hung.
SO Termeszet Vilaga (2001), 132(2), 81-82
CODEN: TEVIAS; ISSN: 0040-3717
PB Magyar Hivatalos Kozlonykiado
DT Journal; General Review
LA Hungarian
AB A review with no refs. Discussed are: **antibodies**; **IgE** and **allergy**; **histamine** activity; **therapeutic** intervention; other roles of histamine; and histamine research.

L5 ANSWER 33 OF 71 CAPLUS COPYRIGHT 2003 ACS on STN
AN 2000:670495 CAPLUS
DN 134:174106
TI Effects of rush immunotherapy (RIT) on cytokine production in hymenoptera allergy
AU Hirata, Hirokuni; Arima, Masafumi; Yukawa, Tatsuo
CS Department of Pulmonary Medicine and Clinical Immunology, Dokkyo University School of Medicine, Tochigi, 321-0293, Japan
SO Dokkyo Journal of Medical Sciences (2000), 27(1), 27-40
CODEN: DJMSDB; ISSN: 0385-5023
PB Dokkyo Medical Society
DT Journal
LA English
AB Background: Approx. forty people die every year in our country from anaphylaxis caused by hymenoptera stings. A rush immunotherapy (RIT), in which increasing doses of bee venom exts. (BVE) are s.c. injected 4 times a day and the maintenance is achieved within two weeks, is highly effective in the prevention of systemic anaphylaxis due to a hymenoptera sting, but immunol. mechanisms for its effectiveness are largely unknown. Objective: To elucidate its mol. mechanisms, we studied how immune responses to bee venom antigen are altered after RIT. We also studied which of monocytes and B cells are more important as antigen-presenting cells (APCs) for BVE-specific CD4+ T cells. The roles of CD80 and CD86 mols. on APCs for the cytokine prodn. and proliferation of BVE-specific CD4+ T cells were also investigated. **Methods**: Blood samples were taken before and after RIT from 6 patients with hymenoptera **allergy** who received the **therapy**. The levels of venom-specific **IgE** and IgG4 antibodies were measured before and 1, 3, 6, 12, 24 and 36 mo after RIT. Histamine release from peripheral blood cells in response to venom-antigen stimulation was also studied. Before and 3 mo after RIT, CD4+ T cells, B cells and monocytes were purified from peripheral blood mononuclear cells by a neg. selection **method** with appropriate monoclonal antibodies. CD4+ T cells were incubated alone or with monocytes or B cells in the presence or absence of BVE for 48 h and IL-4, IL-5, IL-10, IL-12, IL-18, IFN-.gamma. and TGF-.beta.1 concns. in the supernatants were detd. by enzyme linked immunosorbent assay. In the expts. examg. the roles of CD80 and CD86 mols. on APCs, anti-CD80 or anti-CD86 antibodies were added to the culture of CD4+ T cells plus monocytes 30 min before their exposure to BVE. Results: Venom-specific **IgE** antibodies transiently increased one month after RIT and returned to their baseline values by 6 mo after RIT, whereas venom-specific IgG4 antibodies continued to gradually increase up to at least 3 yr after RIT. Histamine release from peripheral blood cells

in response to stimulation with phospholipase A2, a major antigen in BVE, was significantly suppressed after RIT. Fluorescence-activated cell sorter (FACS) anal. of intracellular IFN-.gamma. and IL-4 in CD4+ T cells stimulated with BVE revealed that intracellular IFN-.gamma.-and IL-4-pos. cells were increased when CD4+ T cells were co-cultured with monocytes but not with B cells, suggesting the importance of monocytes as APCs for BVE-specific CD4+ T cells. Secretion of IFN-.gamma., IL-18 and IL-5 into the culture medium from BVE-specific CD4+ T cells had significantly increased 3 mo after RIT, whereas that of IL-4, IL-10, IL-12 and TGF-.beta. was unchanged, resulting in a decrease in IL-4/IFN-.gamma. ratio. Pretreatment with anti-CD80 or anti-CD86 antibodies did not have a significant influence on the cytokine prodn. of CD4+ T cells stimulated with BVE. In contrast, BVE stimulation-induced CD4+ T cell proliferation was significantly inhibited when cells taken before RIT were used, but this inhibition was not obsd. in the CD4+ T cells taken 3 mo after RIT. Conclusion: The present data suggest that the direct mechanisms by which RIT achieves its effects are an increase in levels of venom-specific IgG4 antibodies which are thought to act as blocking antibodies for the venom-specific **IgE antibodies** and an inhibition of **histamine** release presumably from peripheral blood basophils stimulated with bee venom antigen. An increase in IFN-.gamma., IL-18 and IL-5 prodn. by BVE-specific CD4+ T cells and the resultant IL-4/IFN-.gamma. ratio obsd. 3 mo after RIT may explain these immunol. changes.

RE.CNT 62 THERE ARE 62 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 34 OF 71 CAPLUS COPYRIGHT 2003 ACS on STN
AN 2000:536721 CAPLUS
DN 133:344338
TI Loratadine in the treatment of mosquito-bite-sensitive children
AU Karppinen, A.; Kautiainen, H.; Reunala, T.; Petman, L.; Reunala, T.; Brummer-Korvenkontio, H.
CS Department of Dermatology, Tampere University Hospital and University of Tampere, Tampere, Finland
SO Allergy (Copenhagen) (2000), 55(7), 668-671
CODEN: LLRGDY; ISSN: 0105-4538
PB Munksgaard International Publishers Ltd.
DT Journal
LA English
AB Children frequently experience harmful whealing and delayed papules from mosquito bites. Whealing is mediated by antisaliva **IgE antibodies** and **histamine**, but the effect of antihistamines on mosquito-bite symptoms has not been evaluated in children. The effect of loratadine (0.3 mg/kg) was examd. in 28 mosquito-bite-sensitive children (aged 2-11 yr). The double-blind, placebo-controlled, crossover study was performed with exposure to Aedes aegypti lab. mosquitoes. The size of the bite lesion and the intensity of pruritus (visual analog scale) were measured at 15 min and at 2, 6, and 24 h. Loratadine decreased the size of the wheals by 45% ($P < 0.001$, 25 children) and accompanying pruritus by 78% ($P = 0.011$, 12 children) at 15 min compared to placebo. The size of the 24-h delayed bite lesion also decreased significantly ($P = 0.004$), but there was no change at 2 or 6 h. Loratadine was well tolerated and no marked side-effects were recorded. This study in children shows that prophylactically given loratadine decreases significantly the whealing and pruritus caused by mosquito bites and also reduces the size of the 24-h bite lesions. Therefore, the **therapeutic** profile of loratadine extends from immediate to delayed **allergic** symptoms in mosquito-bite-sensitive children.

RE.CNT 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 35 OF 71 CAPLUS COPYRIGHT 2003 ACS on STN
AN 1999:765901 CAPLUS

TI Suppressive effects of Hochu-ekki-to, a traditional Chinese medicine, on IgE production and histamine release in mice immunized with ovalbumin

AU Suzuki, Takahito; Takano, Ichiro; Nagai, Fumiko; Fujitani, Tomoko; Ushiyama, Keiko; Okubo, Tomoko; Seto, Takako; Ikeda, Shingo; Kano, Itsu

CS Department of Toxicology, The Tokyo Metropolitan Research Laboratory of Public Health, Tokyo, 169-0073, Japan

SO Biological & Pharmaceutical Bulletin (1999), 22(11), 1180-1184
CODEN: BPBLEO; ISSN: 0918-6158

PB Pharmaceutical Society of Japan

DT Journal

LA English

AB We examd. the effects of Bu-Zhong-Yi-Qi-Tang (Japanese name: Hochu-ekki-to, HET), a traditional Chinese medicine, on **IgE** prodn. and histamine release in mice immunized i.p. with a mixt. of ovalbumin (OA) and aluminum hydroxide (alum adjuvant). Three groups of mice were orally **administered** 0, 1.7 or 17 mg of HET on day 13 after the first immunization with a mixt. of 1 .mu.g OA and 1 mg alum adjuvant. They were again immunized with the same dose of OA plus alum adjuvant on day 14. The immunol. changes in mice **treated** with OA alone or OA plus HET were examd., and the following findings were obtained. In the HET-**treated** mice, the elevation of anti-OA **IgE** in serum, and histamine release from basophils in blood, were significantly suppressed. A significant suppression of interleukin-4 (IL-4) secretion and proliferation of splenic lymphocytes in primary culture was also obsd. A tendency to suppress the elevation of anti-OA IgG1 in serum and interleukin-2 (IL-2) secretion from splenic lymphocytes was obsd. in the HET-**treated** mice. These findings suggest that oral **administration** of HET suppresses **IgE** **antibody** prodn. and **histamine** release in type I **allergic** reaction in mice immunized with OA plus alum adjuvant; this shows the efficacy of HET in **treating** type I **allergic** diseases, such as asthma.

RE.CNT 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 36 OF 71 CAPLUS COPYRIGHT 2003 ACS on STN

AN 1998:94591 CAPLUS

DN 128:153161

TI Methods for diagnosis of allergy

IN Wai, Fei David Tai; Lowe, John; Jardieu, Paula

PA Genentech, Inc., USA

SO U.S., 33 pp., Cont.-in-part of U.S. Ser. No. 165,436, abandoned.
CODEN: USXXAM

DT Patent

LA English

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5714338	A	19980203	US 1995-393014	19950227
	WO 9516203	A2	19950615	WO 1994-US14282	19941209
	WO 9516203	A3	19950629		

W: CA, JP, US
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE

PRAI US 1993-165436 19931210
WO 1994-US14282 19941209

AB Provided are **methods** for the diagnosis of **allergic** disease wherein **IgE** specific for an **allergen** of interest is detected in a patient serum sample by using the patient serum sample to sensitize in the presence or absence of an **IgE** antagonist a mast cell or basophil host genetically engineered to display surface expression of a Fc.epsilon.RI subunit that is capable of mediating the host cells release of a pharmacol. mediator upon induction with patient serum and **allergen**, challenging the sensitized host cells with the **allergen** of interest, and detg. the presence or

absence of **IgE** specific to the **allergen** of interest in the patient serum sample by comparing the release of the pharmacol. mediator produced by host cells sensitized with patient serum in the presence of the **IgE** antagonist to the release of the pharmacol. mediator produced by host cells sensitized with patient serum in the absence of the **IgE** antagonist. The **IgE** antagonist is an anti-**IgE** antibody or monoclonal anti-**IgE** **antibody**, and the released mediator is **histamine**.

RE.CNT 43 THERE ARE 43 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 37 OF 71 CAPLUS COPYRIGHT 2003 ACS on STN
AN 1995:854353 CAPLUS
DN 123:254575
TI Monoclonal antibodies that bind to soluble IgE but do not bind IgE on IgE expressing B lymphocytes or basophils
IN Chang, Tse-wen
PA Tanox Biosystems, Inc., USA
SO U.S., 8 pp. Cont.-in-part of U.S. Ser. No. 291,068, abandoned.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 13

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5449760	A	19950912	US 1989-320294	19890306
	US 5422258	A	19950606	US 1988-226421	19880729
	JP 08187083	A2	19960723	JP 1995-242425	19950828
	JP 2788979	B2	19980820		
PRAI	US 1987-140036	B2	19871231		
	US 1988-226421	A2	19880729		
	US 1988-291068	B2	19881228		
	JP 1989-501629		19881229		

AB Antibodies that bind sol. IgE but not IgE on the surface of B lymphocytes or basophils are described. The antibodies do not induce histamine release by basophils or mast cells.

L5 ANSWER 38 OF 71 CAPLUS COPYRIGHT 2003 ACS on STN
AN 1994:506525 CAPLUS
DN 121:106525
TI A human monoclonal antibody to the IgE CH4 domain
IN Washida, Naohiro; Yoshida, Toshiko; Morinaga, Tomonori; Mizuno, Atsuko; Goto, Masaaki; Kobayashi, Fumie
PA Snow Brand Milk Products Co., Ltd., Japan
SO Eur. Pat. Appl., 21 pp.
CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 592230	A1	19940413	EP 1993-308006	19931007
	R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, NL, SE				
	JP 06113881	A2	19940426	JP 1992-293800	19921007
	CA 2107761	AA	19940408	CA 1993-2107761	19931005
	AU 9348893	A1	19940421	AU 1993-48893	19931007
	ZA 9307451	A	19950407	ZA 1993-7451	19931007
PRAI	JP 1992-293800		19921007		

AB A human monoclonal antibody against the peptide KTKGSGFFVF in the CH4 region of human **IgE** involved in signal transduction of chem. mediator release from sensitized mast cells and basophils is described. The monoclonal **antibody** inhibits **histamine** release from mast cells by stimulation with **allergen** and so may be useful in diagnostics and **therapeutics**.

L5 ANSWER 39 OF 71 CAPLUS COPYRIGHT 2003 ACS on STN
AN 1994:214577 CAPLUS
DN 120:214577
TI Allergy treatment with a peptide vaccine
AU Stanworth, D. R.
CS Dep. Immunol., Univ. Birmingham, Birmingham, B15 2TJ, UK
SO Prog. Allergy Clin. Immunol., Proc. Int. Congr. Allergol. Clin. Immunol., 14th (1992), Meeting Date 1991, 620-3. Editor(s): Miyamoto, Terumasa; Okuda, Minoru. Publisher: Hogrefe & Huber, Seattle, Wash.
CODEN: 59TRA2
DT Conference; General Review
LA English
AB A review with 14 refs. The results of the exptl. animal studies suggest that a human .epsilon.-chain decapeptide could form the basis of a novel vaccine for the **treatment** of **IgE**-mediated **allergies** of the asthma-hay fever type. This claim is strengthened by the results of more recent studies in which relatively long lasting protection in **allergic** rats has been achieved by active immunization with protein-carrier together with an adjuvant (i.e. Al(OH)3) which would be acceptable in humans. Furthermore, preliminary immunization studies in monkeys (cynomolgous) have revealed that the same immunogenic form of the peptide is capable of inducing the prodn. of protective anti-peptide antibodies, as indicated by the demonstration that they are capable of markedly reducing **allergen**-induced **histamine** release from **IgE antibody**-sensitized rat mast cells in vitro.

L5 ANSWER 40 OF 71 CAPLUS COPYRIGHT 2003 ACS on STN
AN 1992:604787 CAPLUS
DN 117:204787
TI The effect of suplatast tosilate (IPD-1151T) on type I allergic reactions
AU Matsuura, Naosuke; Togawa, Michinori; Mori, Hiroshi; Nagai, Hiroichi; Koda, Akihide
CS Dep. Pharmacol., Gifu Pharm. Univ., Gifu, 502, Japan
SO Yakuri to Chiryo (1973-2000) (1992), 20(7), 2425-35
CODEN: YACHDS; ISSN: 0386-3603
DT Journal
LA Japanese
AB The effect of suplatast tosilate (IPD-1151T) which can inhibit both **IgE antibody** prodn. and antigen-induced **histamine** release from mast cells, on the type I **allergic** reactions was studied in various exptl. models. IPD-1151T inhibited the 48-h homologous passive cutaneous anaphylaxis (PCA) in rats in a dose-dependent fashion. This inhibitory activity was clearly increased by successive **administration** of the agent for 2 to 4 wk. The inhibition of 48-h homologous PCA by IPD-1151T was also found in adrenalectomized rats and infant rats aged 3 wk. IPD-1151T inhibited the 7-day homologous PCA and exptl. induced asthma in guinea pigs. The histamine release from peritoneal exudate cells (PEC) of rats induced by compd. 48/80 was suppressed with 10-5-10-4 g/mL of IPD-1151T. However, the spontaneous, phospholipase A2-induced, and Ca2+ ionophore A23187-induced histamine release was not affected by the agent. On the other hand the ref. compd. tranilast (N-5') suppressed the histamine release from the PEC induced by phospholipase A2. IPD-1151T did not affect the increase in capillary permeability induced by histamine in rats. These results demonstrate that IPD-1151T inhibits type I **allergic** reaction.

L5 ANSWER 41 OF 71 CAPLUS COPYRIGHT 2003 ACS on STN
AN 1992:488554 CAPLUS
DN 117:88554
TI Anti-human IgG causes basophil histamine release by acting on IgG-IgE complexes bound to IgE receptors

AU Lichtenstein, Lawrence M.; Kagey-Sobotka, Anne; White, Jane M.; Hamilton, Robert G.
CS Sch. Med., Johns Hopkins Univ., Baltimore, MD, 21224, USA
SO Journal of Immunology (1992), 148(12), 3929-36
CODEN: JOIMA3; ISSN: 0022-1767
DT Journal
LA English
AB The ability was reexamd. of anti-human IgG **antibodies** to induce **histamine** release from human basophils. A panel of purified murine mAbs with International Union of Immunol. Societies-documented specificity for each of the 4 subclasses of human IgG was used. Of the **allergic** subjects studied, the basophils of 75% (18/24) released >10% histamine to .gtoreq.1 anti-IgG1-4 mAb, whereas none of the nonatopic donor's basophils released histamine after stimulation with optimal amts. of anti-IgG mAb. The basophils of 85% (11/13) of the nonatopic donors did respond to anti-**IgE** challenge, as did 92% (22/24) of the atopic donor cells. Histamine release was induced most frequently by anti-IgG3, and 10/18 anti-IgG responder cells released histamine with mAb specific for .gtoreq.2 different subclass specificities. The rank order for induction of histamine release was anti-IgG3>anti-IgG2>IgG1>anti-IgG4. As in a previous study using polyclonal anti-IgG, 100-300-.mu.g/mL quantities of the anti-IgG mAb were required for maximal histamine release, about 1000-fold higher than those for comparable release with antihuman **IgE**. Specificity studies using both immunoassays and inhibition studies with **IgE** myeloma protein indicated that anti-IgG induced histamine release was not caused by cross-reactivity with **IgE**. Ig receptors were opened by lactic acid **treatment** so that the cells could be passively sensitized. Neither **IgE** myeloma nor IgG myeloma (up to 15 mg/mL) proteins could restore the response to anti-IgG mAb. However, sera from individuals with leukocytes that released histamine upon challenge with anti-IgG mAb could passively sensitize acid-**treated** leukocytes from both anti-IgG responder and nonresponder donors for an anti-IgG response. The only anti-IgG mAb that induced release from these passively sensitized cells were those to which the serum donor was responsive. Sera from non-IgG responders could not restore an anti-IgG response. These data led to the hypothesis that the IgG specific mAb were binding to IgG-**IgE** complexes that were attached to the basophil through **IgE** bound to the **IgE** receptor. This was shown to be correct because passive sensitization to anti-IgG was blocked by previous exposure of the basophils to **IgE** . Thus, anti-IgG-induced release occurs as a result of binding to IgG anti-**IgE** antibodies and crosslinking of the **IgE** receptors on basophils.

L5 ANSWER 42 OF 71 CAPLUS COPYRIGHT 2003 ACS on STN
AN 1991:556958 CAPLUS
DN 115:156958
TI Immunoactive peptides and antibodies and their use in anti-allergy treatment
IN Stanworth, Denis Raymond; Lewin, Ian Victor; Nayyar, Sarita; Jones, Valerie Bryn Celyn
PA National Research Development Corp., UK
SO Eur. Pat. Appl., 21 pp.
CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 403312	A1	19901219	EP 1990-306583	19900615
	R: GR				
	CA 2057860	AA	19901216	CA 1990-2057860	19900615
	WO 9015878	A1	19901227	WO 1990-GB926	19900615
	W: AU, CA, FI, JP, KR, NO, US				

RW: AT, BE, CH, DE, DK, ES, FR, GB, IT, LU, NL, SE

	AU 9058148	A1	19910108	AU 1990-58148	19900615
	AU 646808	B2	19940310		
	ZA 9004670	A	19920226	ZA 1990-4670	19900615
	EP 477231	A1	19920401	EP 1990-909180	19900615
	EP 477231	B1	19950510		

R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, LU, NL, SE

	JP 04505922	T2	19921015	JP 1990-508657	19900615
	AT 122401	E	19950515	AT 1990-909180	19900615
	ES 2073028	T3	19950801	ES 1990-909180	19900615
	JP 2000152783	A2	20000606	JP 1999-343746	19900615
	NO 9104937	A	19911219	NO 1991-4937	19911213
	US 5601821	A	19970211	US 1995-480505	19950607
	US 5955076	A	19990921	US 1995-480379	19950607
PRAI	GB 1989-13737		19890615		
	JP 1990-508657		19900615		
	WO 1990-GB926		19900615		
	US 1991-776380		19911126		
	US 1993-102692		19930805		

AB An immunogen comprising a residue of a histamine-releasing peptide comprising a cationic N-terminal head and a hydrophobic C-terminal tail, together with a residue capable of eliciting **antibodies** against the peptide while inhibiting **histamine** release by the peptide is useful in anti-**allergy treatment**. Preferably the histamine-releasing peptide is Lys-Thr-Lys-Gly-Ser-Gly-Phe-Phe-Val-Phe (I), optionally amidated at the C terminus. **Antibodies** to the **histamine**-releasing peptide are useful for passive immunization. Rats immunized with I-NH2 conjugated with keyhole limpet hemocyanin before or after sensitization with ovalbumin gave pronounced IgM and IgG anti-peptide antibody responses in contrast to controls, but no significant **IgE** anti-peptide responses.

L5 ANSWER 43 OF 71 CAPLUS COPYRIGHT 2003 ACS on STN
AN 1990:629451 CAPLUS
DN 113:229451
TI Passive sensitization and histamine release of basophils. IgE and cellular factors regulating histamine release
AU Nolte, H.; Poulsen, M.; Schioetz, P. O.; Stahl Skov, P.
CS Dep. Pediatr., Univ. Hosp. Aarhus, Aarhus, Den.
SO Allergy (Oxford, United Kingdom) (1990), 45(6), 427-35
CODEN: LLRGDY; ISSN: 0105-4538
DT Journal
LA English
AB This study had two purposes. First, to examine a possible functional heterogeneity of **IgE** regulating basophil histamine release and the effect of using two different donor cells for passive sensitization expts. Second, to investigate basophils not releasing histamine to anti-**IgE** by stimulating protein kinase C with the addn. of the phorbol-ester, TPA. In consecutive expts. responding donor basophils were passively sensitized with plasma from non-responding subjects. Thus, the first set of expts. included passive sensitization of acid **treated** donor basophils from one atopic and one non-atopic patient with plasma from 29 children with exogenous asthma to grass pollen, cat dander, or dust mites. Different secretagogues (anti-**IgE**, Con A, and N-formyl-methionyl-leucyl-phenylalanine) induced different histamine release responses due to a cellular property of the basophils not related to the type of **IgE** bound to the cell membrane. The **allergen**-induced histamine release did not depend on the ext. or type of **IgE** when the biol. activity of each ext. and serum-specific **IgE** levels were similar. However, the atopic donor cells released more histamine than non-atopic donor cells. Thus, histamine release depends on the type of secretagogues and a cellular property which may be influenced by the presence of serum factors and a certain type of **IgE** in the serum of atopics. The second set of

expts. included 10 patients (6 atopics and 4 non-atopics) with non-histamine releasing basophils. In the presence of 10 ng/mL TPA, however, seven of 10 patients released histamine at anti-**IgE** challenge. Three months later two addnl. patients became responsive in the presence of TPA. By passive sensitization of responding donor basophils the nonresponding patients were shown to possess functionally intact **IgE**. Thus, the discrepancies sometimes obsd. between clin. symptoms, serol. **IgE-antibody** measurements and **histamine** release testing in **allergic** patients may be related to a cellular property of basophils.

L5 ANSWER 44 OF 71 CAPLUS COPYRIGHT 2003 ACS on STN
AN 1983:196231 CAPLUS
DN 98:196231
TI Anti-allergic action of glucocorticoids in rats
AU Nagai, Hiroichi; Takizawa, Tamotsu; Nakatomi, Ichiro; Matsuura, Naosuke; Koda, Akihide
CS Dep. Pharmacol., Gifu Coll. Pharm., Gifu, 502, Japan
SO Japanese Journal of Pharmacology (1983), 33(2), 349-55
CODEN: JJPAAZ; ISSN: 0021-5198
DT Journal
LA English
AB The effects of hydrocortisone, prednisolone, and dexamethasone on **IgE** antibody-mediated immediate hypersensitivity reactions in rats were studied. Forty-eight-hour homologous passive cutaneous anaphylaxis (PCA) was inhibited in a dose-dependent manner by the **administration** of steroids 2 h prior to challenge. When steroids were **administered** at various times before challenge, each steroid showed different patterns of time courses for inhibition of homologous PCA. Max. inhibition was obtained 2 h after the **administration** of each steroid. The **IgE antibody**-mediated **histamine** release from peritoneal mast cell in vivo was inhibited by the **administration** of steroids. Time-courses for the inhibitory affects of steroids on histamine release were slightly different from those in PCA. The increase of capillary permeability caused by histamine, serotonin, trypsin, or hyaluronidase in the rat skin was not affected by steroids. The inhibitory action of steroids on PCA was not influenced by non-corticoidal steroids (17.alpha.-methyltestosterone, androstenedione, and progesterone) or arachidonic acid. These results partially explain the inhibitory action of steroids on **IgE** antibody-mediated immediate hypersensitivity. The inhibition of histamine release would contribute towards the anti-**allergic** action of steroids but not antagonistic effect on the mediators. Also the action of glucocorticoids receptor or the inhibition of arachidonic acid prodn. are not vitally important in connection with the antiallergic action of steroids.

L5 ANSWER 45 OF 71 CAPLUS COPYRIGHT 2003 ACS on STN
AN 1980:87875 CAPLUS
DN 92:87875
TI Immunological release of histamine from human lung. I. Studies on the .beta.2-sympathomimetic stimulator fenoterol
AU Morr, Harald
CS 1st Med. Universitaetsklin. Hamburg-Eppendorf, Hamburg, D-2000/20, Fed. Rep. Ger.
SO Respiration (1979), 38(3), 163-7
CODEN: RESPBD; ISSN: 0025-7931
DT Journal
LA English
AB Human lung tissue passively sensitized with anti-grass pollen **IgE antibodies** released **histamine** [51-45-6] upon exposure to specific grass pollen antigen. Fenoterol (I) [13392-18-2], a .beta.2-sympathomimetic stimulator drug, was a potent inhibitor of antigen-induced release of histamine. This inhibitory effect occurred

with I concns. of 2 .times. 10-8 to 1 .times. 10-7M, and amounted to 67 and 95%, resp. Thus, the .beta.2-receptor stimulator I is a valuable drug for **treating allergic** bronchial asthma, since it exhibits a combination of prophylactic and direct **therapeutic** properties.

L5 ANSWER 46 OF 71 CAPLUS COPYRIGHT 2003 ACS on STN
AN 1970:76973 CAPLUS
DN 72:76973
TI Capacity of human immunoglobulin E to mediate the release of histamine and slow-reacting substance of anaphylaxis (SBS-A) from monkey lung
AU Ishizaka, Teruko; Ishizaka, Kimishige; Orange, Robert P.; Austen, K. Frank
CS Children's Asthma Res. Inst., Denver, CO, USA
SO Journal of Immunology (1970), 104(2), 335-43
CODEN: JOIMA3; ISSN: 0022-1767
DT Journal
LA English
AB Monkey lung fragments passively sensitized in vitro with human serumrich in immunoglobulin (Ig)E **antibody** released both **histamine** and slow-reacting substance of anaphylaxis (SRS-A) upon challenge with specific **allergen** or anti-**IgE**. The sensitizing activity of the atopic serum was heat labile and was removed by **treatment** with an anti-**IgE** immunosorbent. In the reversed-type reactions, 7 S anti-**IgE** and its F(ab')2 fragments had comparable activity in mediating the release of both histamine and SRS-A, and Fab' fragments did not release either mediator suggesting that bridging of 2 cell-bound **IgE** mols. may be the initial step of the reaction. Monospecific antiserum against human IgG, IgM, IgA, or IgDfailed to release either mediator from sensitized tissue. Isolated E myeloma protein also sensitized monkey lung fragments for the release of both histamine and SRS-A by anti-**IgE**. It thus appears that **IgE** sensitizes monkey lung fragments for the direct (antigen-induced) or reversed (anti-**IgE**-induced) release of both histamine and SRS-A.

L5 ANSWER 47 OF 71 USPATFULL on STN
AN 2003:153615 USPATFULL
TI Antigenic protein originating in malassezia
IN Takesako, Kazutoh, Otsu-shi, JAPAN
Okado, Takashi, Soraku-gun, JAPAN
Yagihara, Tomoko, Hikone-shi, JAPAN
Kuroda, Masanobu, Otsu-shi, JAPAN
Onishi, Yoshimi, Kyoto-shi, JAPAN
Kato, Ikunoshin, Uji-shi, JAPAN
Akiyama, Kazuo, Kawasaki-shi, JAPAN
Yasueda, Hiroshi, Sagamihara-shi, JAPAN
Yamaguchi, Hideyo, Kawasaki-shi, JAPAN
PA Takara Shuzo Co., Ltd. (non-U.S. corporation)
PI US 2003105283 A1 20030605
AI US 2002-109670 A1 20020401 (10)
RLI Division of Ser. No. US 1998-91097, filed on 12 Jun 1998, GRANTED, Pat. No. US 6432407 A 371 of International Ser. No. WO 1996-JP3602, filed on 10 Dec 1996, UNKNOWN
PRAI JP 1995-346627 19951212
JP 1996-257612 19960905
JP 1996-257613 19960905
DT Utility
FS APPLICATION
LREP BIRCH STEWART KOLASCH & BIRCH, PO BOX 747, FALLS CHURCH, VA, 22040-0747
CLMN Number of Claims: 32
ECL Exemplary Claim: 1
DRWN 37 Drawing Page(s)
LN.CNT 3631
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A substantially pure, isolated, antigenic protein from fungi of the genus Malassezia, characterized in that said antigenic protein has a binding ability to IgE antibodies from patients with allergies; an antigenic fragment derived from the antigenic protein; and an antibody against the antigenic protein or fragments thereof. According to the present invention, there can be provided an isolated and purified antigenic protein having high purity from Malassezia, antigenic fragments thereof, and a specific antibody against those antigenic protein or fragments thereof. In addition, there can be provided a diagnostic agent, a therapeutic agent, or a prophylactic drug for Malassezia allergies, wherein the agent includes, as an active ingredient, the antigenic protein or fragments thereof.

L5 ANSWER 48 OF 71 USPATFULL on STN
AN 2003:120162 USPATFULL
TI Human monoclonal antibodies to FC alpha receptor (CD89)
IN Hudson, Debra, Livermore, CA, UNITED STATES
van Dijk, Marcus A., Bilthoven, NETHERLANDS
van de Winkel, Jan G.J., Zeist, NETHERLANDS
PI US 2003082643 A1 20030501
AI US 2002-73644 A1 20020211 (10)
PRAI US 2001-338956P 20011105 (60)
US 2001-268075P 20010212 (60)
DT Utility
FS APPLICATION
LREP LAHIVE & COCKFIELD, 28 STATE STREET, BOSTON, MA, 02109
CLMN Number of Claims: 51
ECL Exemplary Claim: 1
DRWN 4 Drawing Page(s)
LN.CNT 3363
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Human monoclonal antibodies which bind specifically to Fc alpha receptor (CD89), including monoclonal antibodies which react specifically to Fc receptor for IgA of human effector cells are disclosed. The binding agents, e.g., antibodies are useful for targeting human effector cells (e.g. macrophages) against a target cell (e.g. a cancer cell, an infectious agent, etc.). For this purpose, bifunctional antibodies or heteroantibodies can be constructed containing the binding region derived from an anti-Fc-alpha receptor antibody and the binding region of a target-specific antibody. Targeted effector cells can specifically lyse target cells.

L5 ANSWER 49 OF 71 USPATFULL on STN
AN 2003:78090 USPATFULL
TI Molecular antigen array
IN Sebbel, Peter, Zurich, SWITZERLAND
Dunant, Nicolas, Zurich, SWITZERLAND
Bachmann, Martin, Winterthur, SWITZERLAND
Tissot, Alain, Zurich, SWITZERLAND
Lechner, Franziska, Zurich, SWITZERLAND
Renner, Wolfgang A., Zurich, SWITZERLAND
Hennecke, Frank, Zurich, SWITZERLAND
Nieba, Lars, Herisau, SWITZERLAND
PA Cytos Biotechnology AG (non-U.S. corporation)
PI US 2003054010 A1 20030320
AI US 2001-848616 A1 20010504 (9)
PRAI US 2000-202341P 20000505 (60)
DT Utility
FS APPLICATION
LREP STERNE, KESSLER, GOLDSTEIN & FOX PLLC, 1100 NEW YORK AVENUE, N.W., SUITE 600, WASHINGTON, DC, 20005-3934
CLMN Number of Claims: 85
ECL Exemplary Claim: 1
DRWN 27 Drawing Page(s)

LN.CNT 8317
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention provides compositions and processes for the production of ordered and repetitive antigen or antigenic determinant arrays. The compositions of the invention are useful for the production of vaccines for the prevention of infectious diseases, the treatment of allergies and the treatment of cancers. Various embodiments of the invention provide for a core particle that is coated with any desired antigen in a highly ordered and repetitive fashion as the result of specific interactions.

L5 ANSWER 50 OF 71 USPATFULL on STN
AN 2003:17979 USPATFULL
TI Octahydro-indolizine and quinolizine and hexahydro-pyrrolizine
IN Apodaca, Richard, San Diego, CA, UNITED STATES
Carruthers, Nicholas I., Poway, CA, UNITED STATES
Carson, John R., Norristown, PA, UNITED STATES
Chai, Wenying, San Diego, CA, UNITED STATES
Kwok, Annette K., San Diego, CA, UNITED STATES
Li, Xiaobing, Belle Mead, NJ, UNITED STATES
Lovenberg, Timothy W., San Diego, CA, UNITED STATES
Rudolph, Dale A., San Diego, CA, UNITED STATES
Shah, Chandravadan R., San Diego, CA, UNITED STATES
PI US 2003013733 A1 20030116
AI US 2001-960031 A1 20010921 (9)
PRAI US 2000-234604P 20000922 (60)
US 2000-234505P 20000922 (60)
DT Utility
FS APPLICATION
LREP AUDLEY A. CIAMPORCERO JR., JOHNSON & JOHNSON, ONE JOHNSON & JOHNSON PLAZA, NEW BRUNSWICK, NJ, 08933-7003
CLMN Number of Claims: 34
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 3615
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention features substituted fused bicyclic compounds, pharmaceutical compositions containing them, and methods of using them to treat or prevent histamine-mediated diseases and conditions.

L5 ANSWER 51 OF 71 USPATFULL on STN
AN 2002:344506 USPATFULL
TI Heterocyclic compounds
IN Bogenstaetter, Michael, London, UNITED KINGDOM
Carruthers, Nicholas I., Poway, CA, UNITED STATES
Jablonowski, Jill A., San Diego, CA, UNITED STATES
Lovenberg, Timothy W., San Diego, CA, UNITED STATES
Ly, Kiev S., San Diego, CA, UNITED STATES
PI US 2002198237 A1 20021226
AI US 2002-104283 A1 20020322 (10)
PRAI US 2001-279802P 20010329 (60)
DT Utility
FS APPLICATION
LREP AUDLEY A. CIAMPORCERO JR., JOHNSON & JOHNSON, ONE JOHNSON & JOHNSON PLAZA, NEW BRUNSWICK, NJ, 08933-7003
CLMN Number of Claims: 45
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 2698
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Pharmaceutically useful heterocyclic compounds, compositions containing them, and methods of using them, for example, as histamine H.sub.3 receptor mediators.

L5 ANSWER 52 OF 71 USPATFULL on STN
AN 2002:301106 USPATFULL
TI Methods and compositions for screening for modulators of IgE synthesis, secretion and switch rearrangement
IN Ferrick, David A., Sunnyvale, CA, UNITED STATES
Swift, Susan E., Menlo Park, CA, UNITED STATES
Armstrong, Randall, Hayward, CA, UNITED STATES
Fox, Bryan, Pacifica, CA, UNITED STATES
PA Rigel Pharmaceuticals, Inc. (U.S. corporation)
PI US 2002168649 A1 20021114
AI US 2001-966976 A1 20010927 (9)
RLI Continuation of Ser. No. US 1998-76624, filed on 12 May 1998, PENDING
DT Utility
FS APPLICATION
LREP ROBIN M. SILVA, FLEHR HOHBACH TEST ALBRITTON & HERBERT LLP, Suite 3400, Four Embarcadero Center, San Francisco, CA, 94111-4187
CLMN Number of Claims: 28
ECL Exemplary Claim: 1
DRWN 26 Drawing Page(s)
LN.CNT 2234
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention relates to methods and compositions useful in screening for modulators of IgE synthesis, secretion and switch rearrangement.

L5 ANSWER 53 OF 71 USPATFULL on STN
AN 2002:227923 USPATFULL
TI Methods and compositions for screening for modulators of IgE synthesis, secretion and switch rearrangement
IN Ferrick, David A., Sunnyvale, CA, UNITED STATES
Swift, Susan E., Menlo Park, CA, UNITED STATES
Armstrong, Randall, Hayward, CA, UNITED STATES
Fox, Bryan, Pacifica, CA, UNITED STATES
PA Rigel Pharmaceuticals, Inc. (U.S. corporation)
PI US 2002123076 A1 20020905
AI US 2001-963206 A1 20010925 (9)
RLI Continuation of Ser. No. US 1998-76624, filed on 12 May 1998, PENDING
DT Utility
FS APPLICATION
LREP ROBIN M. SILVA, FLEHR HOHBACH TEST ALBRITTON & HERBERT LLP, Four Embarcadero Center - Suite 3400, San Francisco, CA, 94111-4187
CLMN Number of Claims: 28
ECL Exemplary Claim: 1
DRWN 26 Drawing Page(s)
LN.CNT 2228
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention relates to methods and compositions useful in screening for modulators of IgE synthesis, secretion and switch rearrangement.

L5 ANSWER 54 OF 71 USPATFULL on STN
AN 2002:201653 USPATFULL
TI Antigenic protein originating in malassezia
IN Takesako, Kazutoh, Otsu, JAPAN
Okado, Takashi, Soraku-gun, JAPAN
Yagihara, Tomoko, Hikone, JAPAN
Kuroda, Masanobu, Otsu, JAPAN
Onishi, Yoshimi, Kyoto, JAPAN
Kato, Ikunoshin, Uji, JAPAN
Akiyama, Kazuo, Kawasaki, JAPAN
Yasueda, Hiroshi, Sagamihara, JAPAN
Yamaguchi, Hideyo, Kawasaki, JAPAN
PA Takara Shuzo Co., Ltd., Kyoto, JAPAN (non-U.S. corporation)
PI US 6432407 B1 20020813
WO 9721817 19970619
AI US 1998-91097 19980612 (9)

WO 1996-JP3602 19961210
19980612 PCT 371 date
PRAI JP 1995-346627 19951212
JP 1996-257612 19960905
JP 1996-257613 19960905
DT Utility
FS GRANTED
EXNAM Primary Examiner: Navarro, Mark; Assistant Examiner: Baskar, Padma
LREP Birch, Stewart, Kolasch & Birch, LLP
CLMN Number of Claims: 13
ECL Exemplary Claim: 1
DRWN 37 Drawing Figure(s); 37 Drawing Page(s)
LN.CNT 3792
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A substantially pure, isolated, antigenic protein from fungi of the genus Malassezia, characterized in that said antigenic protein has a binding ability to IgE antibodies from patients with allergoses; an antigenic fragment derived from the antigenic protein; and an antibody against the antigenic protein or fragments thereof. According to the present invention, there can be provided an isolated and purified antigenic protein having high purity from Malassezia, antigenic fragments thereof, and a specific antibody against those antigenic protein or fragments thereof. In addition, there can be provided a diagnostic agent, a therapeutic agent, or a prophylactic drug for Malassezia allergoses, wherein the agent includes, as an active ingredient, the antigenic protein or fragments thereof.

L5 ANSWER 55 OF 71 USPATFULL on STN
AN 2002:191192 USPATFULL
TI CpG oligonucleotides and related compounds for enhancing ADCC induced by anti-IgE antibodies
IN Chang, Nancy T., Houston, TX, UNITED STATES
PI US 2002102255 A1 20020801
AI US 2001-682562 A1 20010920 (9)
PRAI US 2000-234881P 20000922 (60)
DT Utility
FS APPLICATION
LREP TANOX, INC., 10301 STELLA LINK, HOUSTON, TX, 77025
CLMN Number of Claims: 9
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 480
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention relates to a method of stimulating antibody-dependent cellular cytotoxicity to enhance the elimination of IgE-bearing B-cells comprising administering to a mammal an anti-IgE antibody, which binds to membrane bound IgE, but does not induce histamine release and administering an ISO to the mammal. The ISO may be a CpG containing oligonucleotide, or a modified CpG-containing oligonucleotide with an electron-withdrawing group at least at position C-5 of the cytosine in the CpG sequence. In addition, the method may include the administration of an allergen to improve desensitization therapy.

L5 ANSWER 56 OF 71 USPATFULL on STN
AN 2002:126761 USPATFULL
TI Non-imidazole aryloxyalkylamines
IN Apodaca, Richard, San Diego, CA, UNITED STATES
Carruthers, Nicholas I., Poway, CA, UNITED STATES
Dvorak, Curt A., San Diego, CA, UNITED STATES
Rudolph, Dale A., San Diego, CA, UNITED STATES
Shah, Chandravadan R., San Diego, CA, UNITED STATES
Xiao, Wei, San Diego, CA, UNITED STATES
PI US 2002065278 A1 20020530
AI US 2001-922631 A1 20010806 (9)

PRAI US 2000-223768P 20000808 (60)
DT Utility
FS APPLICATION
LREP AUDLEY A. CIAMPORCERO JR., JOHNSON & JOHNSON, ONE JOHNSON & JOHNSON PLAZA, NEW BRUNSWICK, NJ, 08933-7003
CLMN Number of Claims: 65
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 3509
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Substituted aryloxyalkylamines of formula (I), compositions containing them, and methods of making and using them to treat histamine-mediated conditions.

L5 ANSWER 57 OF 71 USPATFULL on STN
AN 2002:72884 USPATFULL
TI Non-imidazole aryloxypiperidines
IN Apodaca, Richard, San Diego, CA, UNITED STATES
Carruthers, Nicholas I., Poway, CA, UNITED STATES
Dvorak, Curt A., San Diego, CA, UNITED STATES
Shah, Chandravadan R., San Diego, CA, UNITED STATES
Xiao, Wei, San Diego, CA, UNITED STATES
PI US 2002040024 A1 20020404
AI US 2001-922619 A1 20010806 (9)
PRAI US 2000-223768P 20000808 (60)
DT Utility
FS APPLICATION
LREP AUDLEY A. CIAMPORCERO JR., JOHNSON & JOHNSON, ONE JOHNSON & JOHNSON PLAZA, NEW BRUNSWICK, NJ, 08933-7003
CLMN Number of Claims: 60
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 3246
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Substituted non-imidazole aryloxypiperidine compounds, compositions containing them, and methods of making and using them to treat or prevent histamine-mediated conditions.

L5 ANSWER 58 OF 71 USPATFULL on STN
AN 2002:67243 USPATFULL
TI Bicyclic compounds
IN Bogenstaetter, Michael, Del Mar, CA, UNITED STATES
Chai, Wenying, San Diego, CA, UNITED STATES
Kwok, Annette K., San Diego, CA, UNITED STATES
PI US 2002037896 A1 20020328
AI US 2001-922622 A1 20010806 (9)
PRAI US 2000-223768P 20000808 (60)
DT Utility
FS APPLICATION
LREP AUDLEY A. CIAMPORCERO JR., JOHNSON & JOHNSON, ONE JOHNSON & JOHNSON PLAZA, NEW BRUNSWICK, NJ, 08933-7003
CLMN Number of Claims: 31
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 1915
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Substituted N-substituted alkoxyphenyl compounds, compositions containing them, and methods of making and using them.

L5 ANSWER 59 OF 71 USPATFULL on STN
AN 1998:11885 USPATFULL
TI Methods for diagnosis of allergy
IN Wai Fei, David Tai, Belmont, CA, United States
Lowe, John, Daly City, CA, United States

Jardieu, Paula, San Francisco, CA, United States
PA Genentech, Inc., South San Francisco, CA, United States (U.S. corporation)
PI US 5714338 19980203
WO 9516203 19950615
AI US 1995-393014 19950227 (8)
WO 1994-US14282 19941209
19950227 PCT 371 date
19950227 PCT 102(e) date
RLI Continuation-in-part of Ser. No. US 1993-165436, filed on 10 Dec 1993, now abandoned
DT Utility
FS Granted
EXNAM Primary Examiner: Chan, Christina Y.; Assistant Examiner: VanderVegt, F. Pierre
LREP Love, Richard B.
CLMN Number of Claims: 15
ECL Exemplary Claim: 1
DRWN 20 Drawing Figure(s); 11 Drawing Page(s)
LN.CNT 2478
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Provided are methods for the diagnosis of allergic disease wherein IgE specific for an allergen of interest is detected in a patient serum sample by using the patient serum sample to sensitize in the presence or absence of an IgE antagonist a mast cell or basophil host genetically engineered to display surface expression of a Fc.epsilon.RI subunit that is capable of mediating the host cells release of a pharmacological mediator upon induction with patient serum and allergen, challenging the sensitized host cells with the allergen of interest, and determining the presence or absence of IgE specific to the allergen of interest in the patient serum sample by comparing the release of the pharmacological mediator produced by host cells sensitized with patient serum in the presence of the IgE antagonist to the release of the pharmacological mediator produced by host cells sensitized with patient serum in the absence of the IgE antagonist.

L5 ANSWER 60 OF 71 USPATFULL on STN
AN 96:38997 USPATFULL
TI Peptides representing antigenic epitopes of dog IgE present on B cell but not basophil surface
IN Chang, Tse W., Houston, TX, United States
PA Tanox Biosystems, Inc., Houston, TX, United States (U.S. corporation)
PI US 5514776 19960507
AI US 1994-326767 19941020 (8)
RLI Continuation-in-part of Ser. No. US 1993-137253, filed on 14 Oct 1993 which is a continuation-in-part of Ser. No. US 1993-90527, filed on 9 Jul 1993, now patented, Pat. No. US 5342924 which is a continuation-in-part of Ser. No. US 1992-973321, filed on 29 Oct 1992, now patented, Pat. No. US 5254671 which is a continuation-in-part of Ser. No. US 1990-515604, filed on 27 Apr 1990, now patented, Pat. No. US 5274075 which is a continuation-in-part of Ser. No. US 1990-468766, filed on 23 Jan 1990, now patented, Pat. No. US 5260416 which is a continuation-in-part of Ser. No. US 1989-369625, filed on 21 Jun 1989 which is a continuation-in-part of Ser. No. US 1988-272243, filed on 16 Nov 1988, now patented, Pat. No. US 5091313 which is a continuation-in-part of Ser. No. US 1988-229178, filed on 5 Aug 1988, now abandoned which is a continuation-in-part of Ser. No. US 1988-226421, filed on 29 Jul 1988 which is a continuation-in-part of Ser. No. US 1987-140036, filed on 31 Dec 1987, now abandoned
DT Utility
FS Granted
EXNAM Primary Examiner: Adams, Donald E.
LREP Mirabel, Eric P.
CLMN Number of Claims: 1

ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 467
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Antigenic epitopes associated with the extracellular segment of the domain which anchors dog immunoglobulin-.epsilon. to the B cell membrane are disclosed. The epitopes are present on dog IgE-bearing B cells but not basophils or the secreted, soluble form of dog IgE. The peptides representing the epitopes associated with the anchor domain of dog IgE can be used to generate antibodies against these regions.

L5 ANSWER 61 OF 71 USPATFULL on STN
AN 96:23031 USPATFULL
TI Basophil-binding monoclonal antibody, method for separation of basophils, method for chemical mediator release from basophils, and method for testing release of basophil-derived chemical mediators
IN Nishimura, Shinji, Moriguchi, Japan
Nishi, Hiroshi, Neyagawa, Japan
Nishimura, Masaji, Kyoto, Japan
PA Shionogi & Co., Ltd., Japan (non-U.S. corporation)
PI US 5500348 19960319
AI US 1993-144447 19931102 (8)
PRAI JP 1992-321164 19921104
DT Utility
FS Granted
EXNAM Primary Examiner: Scheiner, Toni R.; Assistant Examiner: Grun, James L.
LREP Birch, Stewart, Kolasch & Birch
CLMN Number of Claims: 9
ECL Exemplary Claim: 1,2,4
DRWN 4 Drawing Figure(s); 4 Drawing Page(s)
LN.CNT 960
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The monoclonal antibodies of the present invention makes it possible to separate basophils suitable for the IgE-mediated specific chemical mediator release test, because it retains its reactivity with basophils even after being immobilized onto a solid carrier, and because it does not inhibit release of chemical mediators induced by allergens or anti-IgE antibody, and does not induce nonspecific release of chemical mediators. Also, the method for separating basophils of the present invention simplifies the separation of basophils from blood, and by using this method, the histamine release test which otherwise requires complex procedures can be simplified. Further, the group of cells obtained by the method for separating basophils of the present invention can easily be utilized in the release tests for chemical mediators released from basophils such as leukotriene and PAF, which otherwise require expertise for handling.

L5 ANSWER 62 OF 71 USPATFULL on STN
AN 95:82354 USPATFULL
TI Monoclonal antibodies that bind to soluble IGE but do not bind IGE on IGE expressing B lymphocytes or basophils
IN Chang, Tse-wen, Houston, TX, United States
PA Tanox Biosystems, Inc., Houston, TX, United States (U.S. corporation)
PI US 5449760 19950912
AI US 1989-320294 19890306 (7)
RLI Continuation-in-part of Ser. No. US 1988-291068, filed on 28 Dec 1988, now abandoned which is a continuation-in-part of Ser. No. US 1988-226421, filed on 29 Jul 1988, now patented, Pat. No. US 5422258 which is a continuation-in-part of Ser. No. US 1987-140036, filed on 31 Dec 1987, now abandoned
DT Utility
FS Granted
EXNAM Primary Examiner: Hutzell, Paula K.
LREP Mirabel, Eric P., DeConti, Jr., Giulio A.

CLMN Number of Claims: 5
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 726
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Antibodies that bind soluble IgE but not IgE on the surface of B lymphocytes or basophils are described. The antibodies do not induce histamine release by basophils or mast cells.

L5 ANSWER 63 OF 71 USPATFULL on STN
AN 94:75603 USPATFULL
TI Extracellular segments of human .epsilon. immunoglobulin anchoring peptides and antibodies specific therefor
IN Chang, Tse W., Houston, TX, United States
PA Tanox Biosystems, Inc., Houston, TX, United States (U.S. corporation)
PI US 5342924 19940830
AI US 1993-90527 19930709 (8)
DCD 20090225
RLI Continuation-in-part of Ser. No. US 1992-973321, filed on 29 Oct 1992, now patented, Pat. No. US 5254671 which is a continuation-in-part of Ser. No. US 1990-515604, filed on 27 Apr 1990, now patented, Pat. No. US 5274075 which is a continuation-in-part of Ser. No. US 1990-468766, filed on 23 Jan 1990, now patented, Pat. No. US 5260416 which is a continuation-in-part of Ser. No. US 1989-369625, filed on 21 Jun 1989, now abandoned which is a continuation-in-part of Ser. No. US 1988-272243, filed on 16 Nov 1988, now patented, Pat. No. US 5091313 which is a continuation-in-part of Ser. No. US 1988-229178, filed on 5 Aug 1988, now abandoned which is a continuation-in-part of Ser. No. US 1988-226421, filed on 29 Jun 1988 which is a continuation-in-part of Ser. No. US 1987-140036, filed on 31 Dec 1987, now abandoned
DT Utility
FS Granted
EXNAM Primary Examiner: Chan, Christina Y.; Assistant Examiner: Eisenchenk, F. Christopher
LREP Mirabel, Eric P.
CLMN Number of Claims: 3
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 1345
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Antigenic epitopes associated with the extracellular segment of the domain which anchors immunoglobulins to the B cell membrane are disclosed. For IgE, the epitopes are present on IgE-bearing B cells but not basophils or the secreted, soluble form of IgE. Three different isoforms of the C-terminal segment of the human .epsilon. chain resulting from alternative mRNA splicings in the membrane exon region are disclosed, one of which is secreted and not membrane-bound.

L5 ANSWER 64 OF 71 USPATFULL on STN
AN 93:87456 USPATFULL
TI Extracellular segments of human e immunoglobulin anchoring peptides and antibodies specific therefor
IN Chang, Tse W., Houston, TX, United States
PA Tanox Biosystems, Inc., Houston, TX, United States (U.S. corporation)
PI US 5254671 19931019
AI US 1992-973321 19921029 (7)
RLI Continuation-in-part of Ser. No. US 1990-515604, filed on 27 Apr 1990, now abandoned
DT Utility
FS Granted
EXNAM Primary Examiner: Chan, Y. Christina; Assistant Examiner: Eisenchenk, F. C.
LREP Mirabel, Eric P.
CLMN Number of Claims: 3

ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 1331
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Antigenic epitopes associated with the extracellular segment of the domain which anchors immunoglobulins to the B cell membrane are disclosed. For IgE, the epitopes are present on IgE-bearing B cells but not basophils or the secreted, soluble form of IgE. The epitope can be exploited for therapy and diagnosis. For example, antibodies or immunotoxins specific for the epitopes associated with the anchor domain of IgE can be used to selectively destroy or downregulate IgE-bearing lymphocytes, thus blocking IgE-mediated allergic reactions. Three different isoforms of the C-terminal segment of the human .epsilon. chain resulting from alternative mRNA splicings in the membrane exon region are disclosed, one of which is secreted and not membrane-bound.

L5 ANSWER 65 OF 71 USPATFULL on STN
AN 90:46547 USPATFULL
TI Novel peptide and salts thereof and peptide antiallergic agents containing these peptides
IN Noguchi, Keiichi, Hitachi, Japan
Irie, Daisuke, Hitachi, Japan
Nakajima, Bunichiro, Hitachi, Japan
PA Hitachi Chemical Co., Ltd., Tokyo, Japan (non-U.S. corporation)
PI US 4933323 19900612
AI US 1989-315285 19890224 (7)
PRAI JP 1988-72011 19880328
JP 1988-218267 19880902
DT Utility
FS Granted
EXNAM Primary Examiner: Lee, Lester L.
LREP Abelman Frayne Rezac & Schwab
CLMN Number of Claims: 3
ECL Exemplary Claim: 1
DRWN 5 Drawing Figure(s); 4 Drawing Page(s)
LN.CNT 443
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Novel peptide having the primary structure Asp-Ser-Asp-Gly-Lys or pharmaceutically acceptable salts thereof.

The present peptide possesses activity of inhibiting **histamine** release and **IgE antibody** production in the onset of type I-**allergy** and is effective in the prevention or **therapy** of type I-**allergias** such as bronchial asthma, urticaria and **allergic** rhinitis.

L5 ANSWER 66 OF 71 USPATFULL on STN
AN 82:39902 USPATFULL
TI Agent for the treatment of allergic reactions
IN Sedlacek, Hans-Herald, Marburg, Germany, Federal Republic of
Seiler, Friedrich R., Marburg, Germany, Federal Republic of
PA Behringwerke Aktiengesellschaft, Marburg, Germany, Federal Republic of (non-U.S. corporation)
PI US 4344938 19820817
AI US 1979-87481 19791023 (6)
PRAI DE 1978-2846412 19781025
DT Utility
FS Granted
EXNAM Primary Examiner: Phillips, Delbert R.
LREP Curtis, Morris & Safford
CLMN Number of Claims: 10
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 334

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB What are disclosed are a method for the prophylaxis and therapy of allergic reactions and an agent therefor, said agent containing immunoglobulins of class IgG or fragments thereof which have been immunologically modified in their Fc part.

L5 ANSWER 67 OF 71 USPATFULL on STN
AN 79:42224 USPATFULL
TI Polypeptide agents for blocking the human allergic response
IN Hamburger, Robert N., La Jolla, CA, United States
PA The Regents of the University of California, Berkeley, CA, United States (U.S. corporation)
PI US 4171299 19791016
AI US 1976-652868 19760127 (5)
RLI Continuation-in-part of Ser. No. US 1975-565425, filed on 4 Apr 1975, now abandoned
DT Utility
FS Granted
EXNAM Primary Examiner: Phillips, Delbert R.
LREP Phillips, Moore, Weissenberger, Lempio & Majestic
CLMN Number of Claims: 6
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 1012
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A group of relatively low molecular weight polypeptides having from 3 to 10 amino acids block the allergic response. These "blocking" polypeptides have amino acid sequences corresponding to amino acid sequences appearing in the 2nd, 3rd and 4th domains of the epsilon chain of IgE. Specific active "blocking" polypeptides are disclosed and the synthesis and use thereof are described.

L5 ANSWER 68 OF 71 USPATFULL on STN
AN 79:31571 USPATFULL
TI Method for blocking allergic responses
IN Hamburger, Robert N., La Jolla, CA, United States
PA The Regents of the University of California, Berkeley, CA, United States (U.S. corporation)
PI US 4161522 19790717
AI US 1978-940323 19780907 (5)
RLI Continuation-in-part of Ser. No. US 1976-652868, filed on 27 Jan 1976, now Defensive Publication No. which is a continuation-in-part of Ser. No. US 1975-565425, filed on 4 Apr 1975, now abandoned
DT Utility
FS Granted
EXNAM Primary Examiner: Phillips, Delbert R.
LREP Phillips, Moore, Weissenberger, Lempio & Majestic
CLMN Number of Claims: 17
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 1152
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A group of relatively low molecular weight polypeptides having from 3 to 10 amino acids block the allergic response. These "blocking" polypeptides have amino acid sequences corresponding to amino acid sequences appearing in the 2nd, 3rd and 4th domains of the epsilon chain of IgE. Certain derivatives of such polypeptides also exhibit "blocking" activity. Specific active "blocking" polypeptides are disclosed and the synthesis and use thereof are described.

L5 ANSWER 69 OF 71 USPATFULL on STN
AN 78:34901 USPATFULL
TI 3-Formylchromones
IN Klutchko, Sylvester, Hackettstown, NJ, United States

Kaminsky, deceased, Daniel, LATE OF Parsippany, NJ, United States BY Bernice R. Kaminsky, administratrix
VON Strandtmann, Maximilian, Rockaway, NJ, United States
PA Warner-Lambert Company, Morris Plains, NJ, United States (U.S. corporation)
PI US 4098799 19780704
AI US 1974-480983 19740619 (5)
RLI Continuation-in-part of Ser. No. US 1973-352149, filed on 18 Apr 1973, now abandoned
DT Utility
FS Granted
EXNAM Primary Examiner: Ford, John M.
LREP Graddis, Albert H., Chow, Frank S., Kelly, Anne M.
CLMN Number of Claims: 2
ECL Exemplary Claim: 1,2
DRWN No Drawings
LN.CNT 375
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Novel 3-formylchromone derivatives are disclosed, substituted on the 5,6,7, or 8 positions by one or more of the following substituents: halogen, hydroxy, lower alkyl, lower alkoxy, lower acyl, lower acyloxy, or methylenedioxy. The corresponding 3-acetal or 3-hydrazone derivatives of the carboxaldehyde group are also disclosed. These compounds, and pharmaceutical compositions containing these compounds are useful for the treatment of allergic conditions and for the treatment of hyperacidity.

L5 ANSWER 70 OF 71 USPATFULL on STN
AN 77:8345 USPATFULL
TI Substituted-3-formylchromone derivatives
IN Klutchko, Sylvester, Hackettstown, NJ, United States
Kaminsky, deceased, Daniel, LATE OF Parsippany, NJ, United States BY Bernice R. Kaminsky, administratrix
VON Strandtmann, Maximilian, Rockaway, NJ, United States
PA Warner-Lambert Company, Morris Plains, NJ, United States (U.S. corporation)
PI US 4008252 19770215
AI US 1975-638256 19751208 (5)
RLI Division of Ser. No. US 1974-480983, filed on 19 Jun 1974, now abandoned which is a continuation-in-part of Ser. No. US 1973-352149, filed on 18 Apr 1973, now abandoned
DT Utility
FS Granted
EXNAM Primary Examiner: Love, Ethel G.
LREP Graddis, Albert H., Chow, Frank S., Kelly, Anne M.
CLMN Number of Claims: 2
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 377
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Novel 3-formylchromone derivatives are disclosed, substituted on the 5,6,7, or 8 positions by one or more of the following substituents: halogen, hydroxy, lower alkyl, lower alkoxy, lower acyl, lower acyloxy, or methylenedioxy. The corresponding 3-acetal or 3-hydrazone derivatives of the carboxaldehyde group are also disclosed. These compoounds, and pharmaceutical compositions containing these compounds are useful for the treatment of allergic conditions and for the treatment of hyperacidity.

L5 ANSWER 71 OF 71 USPATFULL on STN
AN 75:27886 USPATFULL
TI Process for preparing polycyclic 3-formyl gamma-pyrone derivatives
IN von Strandtmann, Maximilian, Rockaway, NJ, United States
Klutchko, Sylvester, Hackettstown, NJ, United States

PA Warner-Lambert Company, Morris Plains, NJ, United States (U.S. corporation)
PI US 3886183 19750527
AI US 1974-480984 19740619 (5)
RLI Continuation-in-part of Ser. No. US 1973-351915, filed on 18 Apr 1973, now abandoned
DT Utility
FS Granted
EXNAM Primary Examiner: Ford, John M.
LREP Graddis, Albert H., Chow, Frank S., Kelly, Anne M.
CLMN Number of Claims: 2
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 337
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Compounds of the formula I: ##SPC1##

wherein R represents hydrogen, halogen, lower alkyl, or lower alkoxy and the Z ring has one of the following structures: ##SPC2##

Are prepared by treating a compound of the formula II: ##SPC3##

wherein R and the Z ring are as defined above with an oxidizing agent. These compounds of the formula I are useful in the treatment of gastric hyperacidity and in the treatment of allergic conditions.

=> d his

(FILE 'HOME' ENTERED AT 10:17:17 ON 21 JUL 2003)

FILE 'MEDLINE, CAPLUS, USPATFULL' ENTERED AT 10:17:40 ON 21 JUL 2003
L1 126067 S HISTAMINE#
L2 1078 S L1 (5A) (ANTIBOD?)
L3 298 S L2 (P) (ALLERG?)
L4 183 S L3 (P) (IGE)
L5 71 S L4 (P) (METHOD# OR TREAT? OR ADMINIST? OR THERAP?)

=> d l5 1-71 kwic

L5 ANSWER 1 OF 71 MEDLINE on STN
AB BACKGROUND: Wheat-dependent, exercise-induced anaphylaxis (WDEIA) is a severe **allergy** where wheat ingestion together with physical exercise induces anaphylaxis. We have previously shown that patients with WDEIA have **IgE** antibodies against gliadin proteins and identified omega-5 gliadin (Tri a 19) as a major **allergen**. OBJECTIVE: The aim of this study was to examine gliadin-specific IgG subclass, IgA and **IgE antibodies**, basophil **histamine** release and cell-mediated responses in WDEIA. **METHODS**: Sera and peripheral blood mononuclear cells (PBMC) were obtained from patients with WDEIA and from controls without wheat **allergy**. Serum antibodies to crude gliadin extract (CGE) and purified omega-5 gliadin were measured by ELISA and basophil reactivity by histamine-release. . . . assay, and cytokine mRNA expression with real-time quantitative PCR. RESULTS: All patients with WDEIA, but none of the controls, had **IgE** antibodies to CGE and omega-5 gliadin. Both **allergens** released high levels of histamine from the basophils of patients with WDEIA. Levels of IgA antibodies to CGE and omega-5. . . . mRNA expression in patients with WDEIA was significantly ($P < 0.01$) suppressed. CONCLUSION: These results suggest that, in addition to **IgE** antibodies against omega-5 gliadin, specific IgA antibodies may be involved in the pathogenesis of WDEIA. Decreased expression of IL-10 mRNA. . .

L5 ANSWER 2 OF 71 MEDLINE on STN
AB BACKGROUND: Provocation tests are invaluable in establishing threshold levels and a causal relationship between atopic asthma and a certain **allergen** source, especially in relation to work-associated exposure. Purified major **allergens** open possibilities for a more accurate assessment of sensitization. OBJECTIVE: To determine the threshold dose of purified major bovine dander **allergen** Bos d 2 in bronchial provocation in comparison with the standard **allergen** and a set of other parameters of **allergy**. **METHOD**: Nine consecutive patients referred to hospital for confirming the bovine origin of their occupational asthma were subjected to bronchial provocation tests with purified natural Bos d 2 and a standard bovine dander **allergen**. Additional tests included bronchial histamine challenge, measurements of total **IgE**, specific **IgE** antibody determinations and skin prick tests (SPT) with both **allergens**. RESULTS: In the provocation tests with Bos d 2, a 15% decrease in the forced expiratory volume in 1 s. . . positive SPT was induced by a median dose of 13.9 +/- 9.8 microg of Bos d 2. Bronchial response to **histamine** and **IgE antibodies** against Bos d 2 showed the highest correlations to the provocations results. CONCLUSIONS: The efficacy of Bos d 2 in. . . the range of the threshold level was determined. There were individual variations, but the response in provocation remains the reference **method** for identification of the cause of occupational atopic asthma. SPT and the measurement of specific **IgE** antibodies, preferably with purified or recombinant major **allergens**, increase the accuracy of the diagnosis.

L5 ANSWER 3 OF 71 MEDLINE on STN
AB BACKGROUND: Children frequently experience harmful whealing and delayed papules from mosquito bites. Whealing is mediated by antisaliva **IgE antibodies** and **histamine**, but the effect of antihistamines on mosquito-bite symptoms has not been evaluated in children. **METHODS**: The effect of loratadine (0.3 mg/kg) was examined in 28 mosquito-bite-sensitive children (aged 2-11 years). The double-blind, placebo-controlled, crossover study. . . the whealing and pruritus caused by mosquito bites and also reduces the size of the 24-h bite lesions. Therefore, the **therapeutic** profile of loratadine extends from immediate to delayed **allergic** symptoms in mosquito-bite-sensitive children.

L5 ANSWER 4 OF 71 MEDLINE on STN
AB We examined the effects of Bu-Zhong-Yi-Qi-Tang (Japanese name: Hochu-ekki-to, HET), a traditional Chinese medicine, on **IgE** production and histamine release in mice immunized intraperitoneally with a mixture of ovalbumin (OA) and aluminum hydroxide (alum adjuvant). Three groups of mice were orally **administered** 0, 1.7 or 17 mg of HET on day 13 after the first immunization with a mixture of 1 microg. . . were again immunized with the same dose of OA plus alum adjuvant on day 14. The immunological changes in mice **treated** with OA alone or OA plus HET were examined, and the following findings were obtained. In the HET-**treated** mice, the elevation of anti-OA **IgE** in serum, and histamine release from basophils in blood, were significantly suppressed. A significant suppression of interleukin-4 (IL-4) secretion and. . . to suppress the elevation of anti-OA IgG1 in serum and interleukin-2 (IL-2) secretion from splenic lymphocytes was observed in the HET-**treated** mice. These findings suggest that oral **administration** of HET suppresses **IgE antibody** production and **histamine** release in type I **allergic** reaction in mice immunized with OA plus alum adjuvant; this shows the efficacy of HET in **treating** type I **allergic** diseases, such as asthma.

L5 ANSWER 5 OF 71 MEDLINE on STN

AB . . . mononuclear cells, platelets, endothelial cells have also been implicated. During immediate hypersensitivity reaction, mast cells and basophils are activated by **allergens** through cross linking of cell-surface-bound **IgE**. However, more often than not, these cells are stimulated by non-immunological mechanisms. At present, some data are better understood: in. . . late phase reaction which involves cytokines and cell adhesion molecules. Recent work has also demonstrated the role of circulating functional **histamine** - releasing auto **antibodies** that bind to the high affinity **IgE** receptor (FcepsilonRI) or, less commonly, to **IgE**. As the pathophysiological mechanisms responsible for urticaria are better defined, **therapeutic** agents other than H1 histamines, should be available.

L5 ANSWER 6 OF 71 MEDLINE on STN

AB . . . shown that the human recombinant histamine releasing factor (HrHRF) caused histamine release from a subset of basophils from donors with **allergy**, and this release seemed to be dependent on the presence of a certain type of **IgE**, termed **IgE**+. **IgE** molecules that did not support HrHRF-induced histamine release were termed **IgE**-. However, subsequently we demonstrated that HrHRF primes anti-**IgE**-**antibody**-induced **histamine** release from all basophils, irrespective of the type of **IgE** on the cell surface. OBJECTIVE: Because these data suggested that HrHRF does not exert its biologic effects by binding to **IgE** , but rather that it interacted with a surface receptor on the basophil, we wanted to obtain functional evidence that HrHRF did or did not bind to the **IgE** molecule. **METHODS**: The rat basophilic leukemia cell line (RBL-SX38), which has been transfected to express a functional human FcepsilonRI (alpha-, beta-, and. . . normal rat FcepsilonRI, was used. The presence of the human FcepsilonRI receptor enables these cells to be sensitized with human **IgE**. Cells were passively sensitized with 1000 ng/mL human **IgE**+ or 1000 ng/mL human **IgE**- for 60 minutes at 37 degrees C. Unsensitized cells served as a control. After the cells were washed, 1 x 10(5) cells were stimulated in the presence of 1 mmol/L Ca2+ with 0.1 microg/mL anti-**IgE**, 40 microg/mL HrHRF, or 40 microg/mL mouse recombinant HRF (MrHRF), which has 96% homology to HrHRF. RESULTS: Mean anti-**IgE** -induced histamine release was 33% +/- 15%, and there was no difference between **IgE**+ sensitization (32% +/- 12%) and **IgE**- sensitization (34% +/- 18%). However, in contrast to human basophil experiments, neither HrHRF (0% +/- 0%) nor MrHRF (3% +/- 5%) caused histamine release in RBL cells sensitized with **IgE**+. In addition, priming the transfected RBL-SX38 cells or the parental cell line, RBL-2H3 cells, with HrHRF or MrHRF did not increase anti-**IgE** -induced histamine release. CONCLUSION: The results indicate that HrHRF does not bind to **IgE**, either **IgE**+ or **IgE**-. Therefore it appears likely that rHRF signals through its own specific receptor, which is not expressed or functional on RBL-SX38. . .

L5 ANSWER 7 OF 71 MEDLINE on STN

AB . . . Pathogenetic mechanisms responsible for efficacy of specific immunotherapy still remain to be fully explained. This concerns both desensitization with classic **allergens** and very rarely used specific immunotherapy with bacteria. Microbes can play important role as hypersensitivity factor in some **allergo**-inflammatory processes. Bacterial products may act as basophil histamine liberators through immunological (**IgE**-mediated) and nonimmunological--particular lectin-sugar way. The aim of study was to verify if histamine release triggered by microbes could be modified. . . challenged with whole, formalin-killed bacteria and with the same bacteria after incubation with specific and nonspecific sera. To differentiate between **IgE** -dependent and non-immunological mechanisms of histamine release, the **IgE** molecules were removed from the surface of the basophils by

exposure to pH 3.6 (stripping). In each experiment **histamine** release induced by anti-**IgE antibodies** was used as control of stripping (Tab. 5, 9). Levels of histamine from the basophils (without and after stripping) incubated. . . were expressed as a percentage of total histamine content in the sample. Histamine release was assayed spectrofluorometrically by using Shore **method** in Norn modification. The main investigations concerned the basophils from 12 healthy, non-atopic individuals, who had positive immediate skin reactions. . . rabbits. As negative control served sera collected from animals after immunization. Additionally the basophils of 6 asthmatic (intrinsic asthma) patients **treated** with autovaccines were examined. All patients demonstrated positive late and delayed skin reactions, 3 of them also immediate, to autologous. . . as a basophils stimulating factor in histamine assay. Microbes were incubated with patients own sera before (unspecific serum) and after **treatment** (source of "specific" antibodies). CONCLUSIONS: 1. Bacteria induced basophil histamine release through two ways: immunological (**IgE** -mediated) and non-immunological (sugar-lectin interactions). 2. Non-immunological interactions played the main role in basophil histamine release induced by bacteria--both in normal. . . induced by homologous strains (Tab. 7). 4. An incubation of autologous bacterial strains with asthmatic patients's sera collected after autovaccines **treatment** has no influence on basophil histamine release induced by these microbes (Tab. 9). 5. There was no correlation between the. . .

L5 ANSWER 8 OF 71 MEDLINE on STN

AB Identification of common **allergenic** structures in mugwort and ragweed pollen. BACKGROUND: Despite the rare occurrence of ragweed in Middle Europe, a surprisingly high number of patients **allergic** to mugwort, a frequently encountered weed, display **IgE** reactivity against ragweed pollen **allergens**. OBJECTIVE: The aim of this study was to investigate whether the high prevalence of **IgE** reactivity against ragweed in patients **allergic** to mugwort is caused by the presence of common **allergenic** determinants. We also sought to characterize any cross-reactive **allergens**. **METHODS**: Common **allergenic** structures in mugwort and ragweed pollen were characterized by qualitative **IgE** immunoblot inhibition experiments performed with natural **allergen** extracts and recombinant **allergens**. The degree of cross-reactivity was estimated by quantitative CAP-FEIA competitions. The clinical significance of cross-reactive **IgE** **antibodies** was studied with **histamine** release experiments and nasal provocation tests. RESULTS: Mugwort and ragweed RAST values were significantly correlated in a population of 82 Austrian patients **allergic** to mugwort. **IgE** antibodies cross-reacted with **allergens** of comparable molecular weight that were present in both extracts. By using recombinant birch profilin and specific antisera for **IgE** inhibition experiments, profilin was identified as one of the cross-reactive components in mugwort and ragweed pollen. Preincubation of sera from patients **allergic** to mugwort with mugwort extract inhibited **IgE** binding to ragweed pollen extract greater than 80%. Mugwort and ragweed pollen extract induced comparable histamine release and reduction of nasal air flow in a patient with **IgE** reactivity against the major mugwort **allergen** Art v 1. CONCLUSION: In addition to profilin, mugwort and ragweed pollen contain a number of cross-reactive **allergens**, among them the major mugwort **allergen** Art v 1. Cross-reactive **IgE** antibodies can lead to clinically significant **allergic** reactions.

L5 ANSWER 9 OF 71 MEDLINE on STN

AB The histamine release test has been proven to be a very useful **method** for in vitro diagnosis of **IgE**-mediated **allergy** to inhalant and food **allergens**, as well as for

the immunotherapy follow-up of the **allergic** patient. The aim of the present study was to assess the influence of the degree of sensitization in **allergic** patients sensitive to Dermatophagoides pteronyssinus on their dose-response curves in histamine release tests. To achieve this aim, we studied 109 D. pteronyssinus **allergic** patients and 25 healthy control subjects. Intracutaneous skin test, D. pteronyssinus-specific and total **IgE** quantitations, and histamine release tests were carried out in all the patients. In the case of the histamine release test,. . . other with maximal release attained at lower concentrations (group II). A sensitization score was designed, after the results from specific **IgE** and intracutaneous skin tests. There were significant differences ($p < 0.05$) in antigen-specific and total **IgE** levels, and in papule diameters and sensitization scores, between the control group and groups I and II. Both groups showed significantly higher ($p < 0.05$) histamine releases than the control group in response to anti-**IgE** antibodies. When stimulating the cells with anti-**IgE antibodies**, **histamine** release in group II was higher than in group I, although this difference was not significant. Finally, the best correlation. . .

L5 ANSWER 10 OF 71 MEDLINE on STN

AB BACKGROUND: Mosquito bites frequently cause cutaneous wheal and flare reactions, and recent immunoblotting studies have shown specific anti-saliva **IgE** antibodies in many persons who have such reactions. OBJECTIVE: The study was designed to show that human serum containing mosquito saliva-specific **IgE antibodies** can produce **histamine** release in vitro and whealing in vivo. **METHODS**: Two mosquito bite-tolerant subjects had bite challenges and Prausnitz-Kustner tests with heated and unheated serum from one patient with Aedes mosquito **allergy**. Immunoblotting and basophil histamine release tests were performed with the patient's and subjects' sera. RESULTS: Both mosquito bite-tolerant subjects had. . . immunoblotting, and basophil histamine release tests are consistent with the hypothesis that mosquito bite whealing is mediated by specific anti-saliva **IgE** antibodies.

L5 ANSWER 11 OF 71 MEDLINE on STN

AB . . . reports have yielded conflicting results on the role of IgG4 antibody on the surfaces of target cells in immediate type **allergy** . This study was performed to elucidate whether IgG4 **antibody** inhibits **IgE**-mediated **histamine** release from target cells after antigenic stimulation, and whether it has reaginic activity. Serum was obtained from patients with nasal **allergy** receiving specific immunotherapy for housedust and mites. **IgE** and IgG4 were enriched affinity chromatographically using monoclonal antibodies to **IgE** and IgG4, respectively, from the pooled sera. Both fraction revealed high antibody activity to Dermatophagoides Farinae antigen. Peripheral blood leukocytes from three non-**allergic** donors were passively sensitized with 100 or 300 micrograms of IgG4 according to the **method** of Levy and Osler with a slight modification. Minimal or no histamine release was observed from leukocytes after challenge with. . . both mite antigen and anti-IgG4 monoclonal antibodies. Furthermore, to investigate the reaginic activity of IgG4, leukocytes from patients with nasal **allergy** were stimulated with anti-IgG4 antibodies. The leukocytes of only three out of twenty patients released up to 10% histamine regardless of the IgG4 concentration, while the other patients' leukocytes released minimal amounts of histamine. Two of the three above-mentioned non-**allergic** donors were passively sensitized with 100 or 300 micrograms of IgG4 either one hour after sensitization with 100 ngs of **IgE** or simultaneously with the same amount of **IgE**. After sensitization with 100 ngs of **IgE**, one showed high-grade histamine release after challenge with 0.5 micrograms/ml mite antigen and the other showed middle-grade release with 0.1. . .

L5 ANSWER 12 OF 71 MEDLINE on STN

AB We have reexamined the ability of anti-human IgG **antibodies** to induce **histamine** release from human basophils. A panel of purified murine mAbs with International Union of Immunological Societies-documented specificity for each of the four subclasses of human IgG was used. Of the 24 **allergic** subjects studied, the basophils of 75% (18/24) released greater than 10% histamine to one or more anti-IgG1-4 mAb, whereas none. . . after stimulation with optimal amounts of anti-IgG mAb. The basophils of 85% (11/13) of the nonatopic donors did respond to anti-**IgE** challenge, as did 92% (22/24) of the atopic donor cells. Histamine release was induced most frequently by anti-IgG3, and 10/18. . . of the anti-IgG mAb were required for maximal histamine release, about 1000-fold higher than those for comparable release with anti-human **IgE**. Specificity studies using both immunoassays and inhibition studies with **IgE** myeloma protein indicated that anti-IgG induced histamine release was not caused by cross-reactivity with **IgE**. Ig receptors were opened by lactic acid **treatment** so that the cells could be passively sensitized. Neither **IgE** myeloma nor IgG myeloma (up to 15 mg/ml) proteins could restore the response to anti-IgG mAb. However, sera from individuals with leukocytes that released histamine upon challenge with anti-IgG mAb could passively sensitize acid-**treated** leukocytes from both anti-IgG responder and nonresponder donors for an anti-IgG response. The only anti-IgG mAb that induced release from. . . could not restore an anti-IgG response. These data led to the hypothesis that the IgG specific mAb were binding to IgG-**IgE** complexes that were attached to the basophil through **IgE** bound to the **IgE** receptor. This was shown to be correct because passive sensitization to anti-IgG could be blocked by previous exposure of the basophils to **IgE**. We conclude that anti-IgG-induced release occurs as a result of binding to IgG anti-**IgE** antibodies and cross-linking of the **IgE** receptors on basophils.

L5 ANSWER 13 OF 71 MEDLINE on STN

AB This study had two purposes. First, to examine a possible functional heterogeneity of **IgE** regulating basophil histamine release and the effect of using two different donor cells for passive sensitization experiments. Second, to investigate basophils not releasing histamine to anti-**IgE** by stimulating protein kinase C with the addition of the phorbol-ester, TPA. In consecutive experiments responding donor basophils were passively sensitized with plasma from non-responding subjects. Thus, the first set of experiments included passive sensitization of acid **treated** donor basophils from one atopic and one non-atopic patient with plasma from 29 children with exogenous asthma to grass pollen, cat dander, or dust mites. Different secretagogues (anti-**IgE**, Concanavalin A, and N-formyl-methionyl-leucyl-phenylalanine) induced different histamine release responses due to a cellular property of the basophils not related to the type of **IgE** bound to the cell membrane. It was demonstrated that the **allergen**-induced histamine release did not depend on the extract or type of **IgE** when the biological activity of each extract and serum-specific **IgE** levels were similar. However, the atopic donor cells released significantly (P less than 0.05) more histamine than non-atopic donor cells.. . . secretagogues and a cellular property which is maybe influenced by the presence of serum factors and a certain type of **IgE** in the serum of atopics. The second set of experiments included 10 patients (6 atopics and 4 non-atopics) with non-histamine releasing basophils. In the presence of 10 ng/ml TPA, however, seven of 10 patients released histamine at anti-**IgE** challenge. Three months later two additional patients became responsive in the presence of TPA. By passive sensitization of responding donor basophils the non-responding patients were shown to possess functionally intact **IgE**. Thus, the discrepancies sometimes observed between clinical symptoms, serological

IgE-antibody measurements and **histamine** release testing in **allergic** patients may be related to a cellular property of basophils.

L5 ANSWER 14 OF 71 MEDLINE on STN

AB Forty-six adult asthmatics **allergic** to D. pteronyssinus (Dp) participated in a 2-year study. Thirty-one underwent hyposensitization (HS-group). Fifteen were **treated** with Dp-extract (Dp-group), and 16 with a similar extract modified by monomethoxypolyethylene glycol with reduced **allergenicity** (mPEG-Dp-group). Fifteen patients served as controls. Dp-specific **antibodies** and **histamine** release from blood basophils were determined and compared with Dp-sensitivity in lungs and skin. In addition, IgG and **IgE** against the major **allergen** Der p I were followed in a subgroup. Dp-specific IgG, IgG1, and IgG4 increased significantly in both HS-**treated** groups after 1 and 2 years (median: 2.5- to 11.6-fold). IgG4 was not induced if maintenance dose during the first. . . 7.4- to 21.4-fold after 2 years. Der p I specific IgG response was unrelated to the occurrence or change in **IgE** with the same specificity. The mPEG-Dp-extract tended to have less effect on skin sensitivity and immunological parameters, differences reaching statistical. . . significance for skin sensitivity only. In the HS-group, the decrease in bronchial sensitivity was significantly correlated to a decrease in **IgE** (r = 0.36), IgG1/IgG4 (r = 0.49), Dp-specific histamine release (r = 0.58), and to an increase in Dp-specific IgG4 (r = -0.36) and IgG4/**IgE** (r = -0.48). In patients improving clinically, Dp-specific IgG4/**IgE** increased, and median Dp-specific **IgE** was reduced to 80% compared with an increase to 150-160% seen in the unchanged or deteriorated group (P less than 0.05). Findings indicate an improvement of effect, if the **allergen** dose is sufficient to reduce specific **IgE** and/or induce an IgG and especially IgG4 response.

L5 ANSWER 15 OF 71 MEDLINE on STN

AB . . . 512 people developed urticaria caused by the latex content of surgical gloves. According to Finnish data, another 24% of those **allergic** to gloves got similar urticaria or itching from using condoms. There was a US report of a case of anaphylactic reaction caused by the condom. The sensitivity test can be based on the determination of immunoglobulin E (**IgE**) **antibody** or on the determination of **histamine** release. The reliability of the former is 60% and that of the latter 94%. The symptoms are **treatable**, but it is best to avoid contact with materials containing latex; in surgical practice it is advisable to use gloves. . .

L5 ANSWER 16 OF 71 MEDLINE on STN

AB **Allergen**-specific immunotherapy has been shown to be clinically effective in patients with seasonal **allergic** rhinitis and/or asthma. Patients who receive this **therapy** undergo a number of specific immunologic changes in response to the **allergen** being **administered**. These include a "blunting" of the seasonal rise of **allergen**-specific **IgE** as well as lowering baseline **IgE** levels, generation of an **allergen**-specific IgG response, development of auto-anti-idiotypic **antibodies**, reduced basophil **histamine** release in response to **allergen**, decreased lymphocyte proliferation, lymphokine production in response to **allergen**, and the generation of **allergen**-specific suppressor T cells that down-regulate lymphoproliferative responses and **IgE** synthesis. The mechanism by which **allergen**-specific immunotherapy produces clinical efficacy is not known. Recent evidence suggests that the development of immunoregulatory responses (suppressor T cells and. . . for the immunologic changes described above but as yet have not been correlated with clinical outcome. Identification of

epitopes on **allergens** that can induce selective T helper/suppressor responses may provide opportunities for producing immunological tolerance and a reduction in the **allergic** diathesis.

L5 ANSWER 17 OF 71 MEDLINE on STN

AB Immunotherapy, also called desensitization, is effective in **treating allergic** rhinitis, insect sting venom hypersensitivity and probably **allergic** asthma. **Administration** of gradually increasing doses of the sensitizing antigen induces several immunological changes. The humoral responses include an increase in specific IgG titer, a decrease in specific **IgE** titer with blunting of its seasonal rise, and an increase in the specific anti-idiotype antibody titer. Cellular changes include diminished responsiveness of the patient's lymphocytes to stimulation by **allergen** as measured by thymidine incorporation. This is accounted for by the generation of suppressor cells specific for the **allergen**. These suppressor cells also induce suppression of **IgE** production by mononuclear cells. An additional effect that is attributed to IT is a decrease in basophil sensitivity to the **allergen** as measured by histamine release. The clinical correlates of these changes are not clear. Currently, none of the responses can be used as a tool for assessing the response in the **treated** individual patient. Although the increase in specific IgG was shown to correlate with the clinical response in patient groups, it. . . best parameter for assessing clinical response is probably the increase in the ratio between the specific IgG and the specific **IgE**. However further studies are warranted to evaluate the significance of the change in anti-idiotype **antibodies**, basophil **histamine** release and perhaps immunological changes yet to be discovered.

L5 ANSWER 18 OF 71 MEDLINE on STN

AB . . . give rise to processes of peach hypersensitivity. This datum together with the scarcity of literature and the use of disparate **methods** of diagnosis prompted us to select the peach as an example of hypersensitivity to a fruit, and to examine the clinical symptoms, skin tests, specific **IgE antibodies** (RASTR) and **histamine** release in a group of 25 patients with peach **allergy**. The results showed a good concordance between clinical history and skin tests (78%) and between RASTR (82%) and histamine release. . . the RASTR (p less than 0.001) or to the histamine release test (p less than 0.001), in terms of peach **allergy** diagnosis. Both the RASTR and the histamine release test were found to be equally valid (p less than 0.001) in "in vitro" peach diagnosis. These findings demonstrate the perfect and complete diagnosis of peach **allergy** with the methodology used.

L5 ANSWER 19 OF 71 MEDLINE on STN

AB This double-blind immunotherapy trial in children, using a purified and standardized Cladosporium herbarum **allergen** preparation, has shown that children with mould asthma and/or rhinoconjunctivitis, responded to immunotherapy with a decrease in specific **IgE** and a significant increase in specific IgG. There was a marked increase in the ratio specific IgG/specific **IgE** as a result of active **treatment**. **IgE**-CRIE radiostaining patterns showed no pronounced changes after 10 months' active **treatment** and no "new sensitivities" could be detected in the studied patients. IgG-CRIE radiostaining, primarily directed towards the important **allergens** , was significantly increased in the active group and particularly towards Ag-12 (partially identical to a previously described major **allergen** in Cladosporium herbarum, Ag-54). Children **treated** with **histamine** placebo showed no change in **antibody** patterns during 10 months of **treatment**.

L5 ANSWER 20 OF 71 MEDLINE on STN
AB Factors traditionally associated with **histamine** release include **IgE antibody** plus antigen and the anaphylatoxins C3a, C4a, and C5a. Yet histamine release is thought to occur in disorders such as. . . This factor may therefore represent one mechanism in which delayed hypersensitivity and histamine release are linked. We are also developing **methods** to better assess the kinin-forming system in **allergic** diseases. Assays for enzyme inhibitor complexes are the most sensitive and specific **methods** for inferring activation in plasma. These include quantitation of activated Hageman factor-C1 INH complexes and kallikrein-C1 INH complexes each of. . . be assayed in purified mixtures, can be detected upon addition of bradykinin to human plasma and are formed by kaolin **treatment** of plasma.

L5 ANSWER 21 OF 71 MEDLINE on STN
AB As diagnostic **methods** of detecting drug-specific **IgE** antibodies become more sophisticated, the evidence implicating specific **IgE** in anaesthetic **allergy** has increased. To implicate **IgE** in reactions, a history resembling anaphylaxis, the demonstration of drug-specific histamine release by intradermal testing and the demonstration of specific. . . necessary. Such evidence is seen in 70% of muscle relaxant reactors. Basophil histamine release studies suggest that histamine release is **allergen**-induced, not direct, and the final evidence necessary is to demonstrate the role of drug-specific **antibodies** in such **histamine** release.

L5 ANSWER 22 OF 71 MEDLINE on STN
AB Twenty asymptomatic atopic asthmatics were **treated** with either cimetidine 100 mg orally (13 patients) or placebo (7 patients) once a day for 4 weeks. Bronchial challenges were performed with the pertinent **allergen** immediately before and 2 and 4 weeks after the initiation of **treatment** and, finally, 4 weeks after the cessation of **treatment**. Before each challenge blood was drawn for the determination of specific **IgE** antibody levels (RAST procedure) and total **IgE** (PRIST), **allergen**- and anti-**IgE** -induced basophil histamine release, and mitogen-induced lymphocyte (3H)-thymidine incorporation. Patients **treated** with cimetidine were found to be significantly (P less than 0.05) less responsive to bronchial **allergen** challenge during the **treatment** than before it; patients **treated** with placebo were more reactive (P less than 0.05) 14 days after the initiation of **treatment**. The difference in responsiveness to **treatment** between the placebo and the cimetidine groups was significant 14 days (P less than 0.01) and 4 weeks (P less than 0.05) after the initiation of **treatment**; no significant difference in **allergen** responsiveness was recorded between the groups 1 month after cessation of **treatment**. No clear-cut changes in specific **IgE antibody** or total **IgE** levels, **histamine** release capacity, or mitogen-induced lymphocyte responsiveness were observed in either group, except that lymphocytes from cimetidine-**treated** patients tended to show an increased ratio of PHA- to PMA-induced thymidine incorporation. Thus, it was found that the **treatment** of asymptomatic atopic asthmatics with low-dose cimetidine reduced their **allergen** sensitivity in bronchial provocation tests by a mechanism which remains to be elucidated.

L5 ANSWER 23 OF 71 MEDLINE on STN
AB Human lung tissue passively sensitized with anti-grass pollen **IgE antibodies** releases **histamine** upon exposure to specific grass pollen antigen. Beta-sympathomimetic agents inhibit the antigen-induced release of histamine, thus beta-sympathomimetic drugs might exhibit a combination of prophylactic and direct bronchodilating properties in the **treatment** of **allergic** bronchial

asthma. The anticholinergic agent ipratropium bromide had no direct effect on the immunologically induced release of histamine. Acetylcholine increased. . .

L5 ANSWER 24 OF 71 MEDLINE on STN
AB The effects of three glucocorticoids (steroids: hydrocortisone, prednisolone and dexamethasone) on **IgE** antibody-mediated immediate hypersensitivity reactions in rats were studied. Forty-eight hr homologous passive cutaneous anaphylaxis (PCA) was inhibited in a dose response manner by the **administration** of steroids 2 hr prior to challenge. When steroids were **administered** at various times before challenge, each steroid showed different patterns of time courses for inhibition of homologous PCA. Maximum inhibition was obtained 2 hr after the **administration** of each steroid. The **IgE antibody**-mediated **histamine** release from peritoneal mast cells in vivo was inhibited by the **administration** of steroids. Time-courses for the inhibitory effects of steroids on histamine release were slightly different from those in PCA. The. . . non-corticoidal steroids (17 alpha-methyltestosterone, androstenedione and progesterone) or arachidonic acid. These results partially explain the inhibitory action of steroids on **IgE** antibody-mediated immediate hypersensitivity. The inhibition of histamine release would contribute towards the anti-**allergic** action of steroids but not the antagonistic effect on the mediators. Also the action of glucocorticoids receptor or the inhibition of arachidonic acid production are not vitally important in connection with the anti-**allergic** action of steroids.

L5 ANSWER 25 OF 71 MEDLINE on STN
AB The aim of hyposensitization **therapy** is to achieve an **allergen** tolerance. The solutions for hyposensitization are available as water soluble, semi-depot or depot **allergen** extracts. The strengths of the solutions are given in the following units: PNU (protein nitrogen units), w/v (weight/volume) and HEP. . . units is of limited value, as no information about the immunological potency is possible. Most experience centres on the parenteral **allergen** application, but recently oral hyposensitization has gained ground. The hyposensitization **treatment** can be performed in the conventional manner or in the form of a rapid hyposensitization. The length of **treatment** is at least 2 years. The assessment of the **therapeutic** efficacy of the **treatment** can be achieved by the history of natural **allergen** exposition, provocation tests on the target organs, the course of the **allergen** specific IgG and **IgE antibodies** as well as testing the **histamine** release from leukocytes. Further improved efficacy, shortening of the course of immunisation and the elimination of side effects should be. . .

L5 ANSWER 26 OF 71 MEDLINE on STN
AB Human lung tissue passively sensitized with anti-grass pollen **IgE antibodies** release **histamine** upon exposure to specific grass pollen antigen. Fenoterol, a beta 2-sympathomimetic stimulator drug, is shown to be a potent inhibitor. . . M, and was determined by 67 and 95%, respectively. Thus, the beta 2-receptor stimulator fenoterol is a valuable drug for **treating allergic** bronchial asthma since it exhibits a combination of prophylactic and direct **therapeutic** properties.

L5 ANSWER 27 OF 71 MEDLINE on STN
AB Exposure to environmental **allergens** leads to human sensitization and disease by two different routes: inhalation (i.e., pollen **allergy**) and parenteral **administration** (i.e., insect sting anaphylaxis). In both, the pathogenesis of disease involves specific **IgE** antibodies and mediator release from mast cells and

basophils. The relevant **allergens** have been characterized and found to be proteins with a molecular mass that ranges from 15,000 to 40,000 daltons. Appropriate diagnostic **methods**, skin testing, basophil **histamine** release and **IgE antibody** measurements (RAST), have been developed. Appropriate immunotherapy (immunization with the relevant **allergens**) leads to an increase in IgG (blocking) antibody. This **therapy** has proved to be useful in inhalational **allergy** and is potentially curative in parenterally induced anaphylaxis.

L5 ANSWER 28 OF 71 CAPLUS COPYRIGHT 2003 ACS on STN
AB We studied the effects of potentiated **antibodies** to **histamine** on prodn. of **IgE** and IgG1 in response to 3-fold immunization of mice with ovalbumin in doses of 0.5, 10, and 100 mg. The course of **treatment** with **antibodies** to **histamine** suppressed prodn. of **allergen**-specific **IgE** and IgG1 in mice 2-fold immunized with ovalbumin in doses of 100 and 0.5 mg, resp. In mice immunized 3 times with ovalbumin in various doses the prepn. suppressed prodn. of **IgE** and IgG1.

L5 ANSWER 29 OF 71 CAPLUS COPYRIGHT 2003 ACS on STN
AB Background: Wheat-dependent, exercise-induced anaphylaxis (WDEIA) is a severe **allergy** where wheat ingestion together with phys. exercise induces anaphylaxis. We have previously shown that patients with WDEIA have **IgE** antibodies against gliadin proteins and identified .omega.-5 gliadin (Tri a 19) as a major **allergen**. Objective: The aim of this study was to examine gliadin-specific IgG subclass, IgA and **IgE antibodies**, basophil **histamine** release and cell-mediated responses in WDEIA. **Methods**: Sera and peripheral blood mononuclear cells (PBMC) were obtained from patients with WDEIA and from controls without wheat **allergy**. Serum antibodies to crude gliadin ext. (CGE) and purified .omega.-5 gliadin were measured by ELISA and basophil reactivity by histamine-release. . . assay, and cytokine mRNA expression with real-time quant. PCR. Results: All patients with WDEIA, but none of the controls, had **IgE** antibodies to CGE and .omega.-5 gliadin. Both **allergens** released high levels of histamine from the basophils of patients with WDEIA. Levels of IgA antibodies to CGE and .omega.-5. . . induction of IL-10 mRNA expression in patients with WDEIA was significantly suppressed. Conclusion: These results suggest that, in addn. to **IgE** antibodies against .omega.-5 gliadin, specific IgA antibodies may be involved in the pathogenesis of WDEIA. Decreased expression of IL-10 mRNA. . .

L5 ANSWER 30 OF 71 CAPLUS COPYRIGHT 2003 ACS on STN
AB Background: Provocation tests are invaluable in establishing threshold levels and a causal relation between atopic asthma and a certain **allergen** source, esp. in relation to work-assocd. exposure. Purified major **allergens** open possibilities for a more accurate assessment of sensitization. Objective: To det. the threshold dose of purified major bovine dander **allergen** Bos d 2 in bronchial provocation in comparison with the std. **allergen** and a set of other parameters of **allergy**. **Method**: Nine consecutive patients referred to hospital for confirming the bovine origin of their occupational asthma were subjected to bronchial provocation tests with purified natural Bos d 2 and a std. bovine dander **allergen**. Addnl. tests included bronchial histamine challenge, measurements of total **IgE**, specific **IgE** antibody detns. and skin prick tests (SPT) with both **allergens**. Results: In the provocation tests with Bos d 2, a 15% decrease in the forced expiratory vol. in 1 s. . . .mu.g). A pos. SPT was induced by a median dose of 13.9 .mu.g of Bos d 2. Bronchial response to **histamine** and **IgE antibodies** against Bos d 2 showed the highest correlations to the provocations results. Conclusions: The efficacy of Bos d 2 in. . . the

range of the threshold level was detd. There were individual variations, but the response in provocation remains the ref. **method** for identification of the cause of occupational atopic asthma. SPT and the measurement of specific **IgE** antibodies, preferably with purified or recombinant major **allergens**, increase the accuracy of the diagnosis.

L5 ANSWER 31 OF 71 CAPLUS COPYRIGHT 2003 ACS on STN
AB . . . region of the hypothalamus, including the pars tuberalis and median eminence. When these intracranial mast cells were passively sensitized with **IgE** via either the intracerebroventricular or i.v. route, there was a marked increase in the adrenal cortisol secretion elicited by a. . . (whether this was delivered via the central or peripheral route). Comp.48/80, a mast cell secretagogue, also increased cortisol secretion when **administered** intracerebroventricularly. Pretreatment (intracerebroventricularly) with anti-corticotropin-releasing factor **antibodies** or a **histamine** H1 blocker, but not an H2 blocker, attenuated the evoked increases in cortisol. These data show that in the dog,. . . and corticotrophin-releasing factor. On the basis of these data, the authors suggest that intracranial mast cells may act as an **allergen** sensor, and that the activated adrenocortical response may represent a life-saving host defense reaction to a type I **allergy**.

L5 ANSWER 32 OF 71 CAPLUS COPYRIGHT 2003 ACS on STN
AB A review with no refs. Discussed are: **antibodies**; **IgE** and **allergy**; **histamine** activity; **therapeutic** intervention; other roles of histamine; and histamine research.

L5 ANSWER 33 OF 71 CAPLUS COPYRIGHT 2003 ACS on STN
AB . . . CD80 and CD86 mols. on APCs for the cytokine prodn. and proliferation of BVE-specific CD4+ T cells were also investigated. **Methods**: Blood samples were taken before and after RIT from 6 patients with hymenoptera **allergy** who received the **therapy**. The levels of venom-specific **IgE** and IgG4 antibodies were measured before and 1, 3, 6, 12, 24 and 36 mo after RIT. Histamine release from. . . after RIT, CD4+ T cells, B cells and monocytes were purified from peripheral blood mononuclear cells by a neg. selection **method** with appropriate monoclonal antibodies. CD4+ T cells were incubated alone or with monocytes or B cells in the presence or. . . were added to the culture of CD4+ T cells plus monocytes 30 min before their exposure to BVE. Results: Venom-specific **IgE** antibodies transiently increased one month after RIT and returned to their baseline values by 6 mo after RIT, whereas venom-specific. . . are an increase in levels of venom-specific IgG4 antibodies which are thought to act as blocking antibodies for the venom-specific **IgE** **antibodies** and an inhibition of **histamine** release presumably from peripheral blood basophils stimulated with bee venom antigen. An increase in IFN-.gamma., IL-18 and IL-5 prodn. by. . .

L5 ANSWER 34 OF 71 CAPLUS COPYRIGHT 2003 ACS on STN
AB Children frequently experience harmful whealing and delayed papules from mosquito bites. Whealing is mediated by antisaliva **IgE** **antibodies** and **histamine**, but the effect of antihistamines on mosquito-bite symptoms has not been evaluated in children. The effect of loratadine (0.3 mg/kg). . . the whealing and pruritus caused by mosquito bites and also reduces the size of the 24-h bite lesions. Therefore, the **therapeutic** profile of loratadine extends from immediate to delayed **allergic** symptoms in mosquito-bite-sensitive children.

L5 ANSWER 35 OF 71 CAPLUS COPYRIGHT 2003 ACS on STN
AB We examd. the effects of Bu-Zhong-Yi-Qi-Tang (Japanese name: Hochu-ekki-to, HET), a traditional Chinese medicine, on **IgE**

prodn. and histamine release in mice immunized i.p. with a mixt. of ovalbumin (OA) and aluminum hydroxide (alum adjuvant). Three groups of mice were orally **administered** 0, 1.7 or 17 mg of HET on day 13 after the first immunization with a mixt. of 1 .mu.g. . . were again immunized with the same dose of OA plus alum adjuvant on day 14. The immunol. changes in mice **treated** with OA alone or OA plus HET were examd., and the following findings were obtained. In the HET-**treated** mice, the elevation of anti-OA **IgE** in serum, and histamine release from basophils in blood, were significantly suppressed. A significant suppression of interleukin-4 (IL-4) secretion and. . . to suppress the elevation of anti-OA IgG1 in serum and interleukin-2 (IL-2) secretion from splenic lymphocytes was obsd. in the HET-**treated** mice. These findings suggest that oral **administration** of HET suppresses **IgE antibody** prodn. and **histamine** release in type I **allergic** reaction in mice immunized with OA plus alum adjuvant; this shows the efficacy of HET in **treating** type I **allergic** diseases, such as asthma.

L5 ANSWER 36 OF 71 CAPLUS COPYRIGHT 2003 ACS on STN
AB Provided are **methods** for the diagnosis of **allergic** disease wherein **IgE** specific for an **allergen** of interest is detected in a patient serum sample by using the patient serum sample to sensitize in the presence or absence of an **IgE** antagonist a mast cell or basophil host genetically engineered to display surface expression of a Fc.epsilon.RI subunit that is capable of mediating the host cells release of a pharmacol. mediator upon induction with patient serum and **allergen**, challenging the sensitized host cells with the **allergen** of interest, and detg. the presence or absence of **IgE** specific to the **allergen** of interest in the patient serum sample by comparing the release of the pharmacol. mediator produced by host cells sensitized with patient serum in the presence of the **IgE** antagonist to the release of the pharmacol. mediator produced by host cells sensitized with patient serum in the absence of the **IgE** antagonist. The **IgE** antagonist is an anti-**IgE** antibody or monoclonal anti-**IgE** **antibody**, and the released mediator is **histamine**.

L5 ANSWER 37 OF 71 CAPLUS COPYRIGHT 2003 ACS on STN
IT 51-45-6, **Histamine**, biological studies
RL: ADV (Adverse effect, including toxicity); BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(release of; monoclonal **antibodies** that bind to sol. **IgE** but do not bind **IgE** on **IgE** expressing B lymphocytes or basophils for **allergy therapy**)

L5 ANSWER 38 OF 71 CAPLUS COPYRIGHT 2003 ACS on STN
AB A human monoclonal antibody against the peptide KTKGSGFFVF in the CH4 region of human **IgE** involved in signal transduction of chem. mediator release from sensitized mast cells and basophils is described. The monoclonal **antibody** inhibits **histamine** release from mast cells by stimulation with **allergen** and so may be useful in diagnostics and **therapeutics**.

L5 ANSWER 39 OF 71 CAPLUS COPYRIGHT 2003 ACS on STN
AB . . . the exptl. animal studies suggest that a human .epsilon.-chain decapeptide could form the basis of a novel vaccine for the **treatment** of **IgE**-mediated **allergies** of the asthma-hay fever type. This claim is strengthened by the results of more recent studies in which relatively long lasting protection in **allergic** rats has been achieved by active immunization with protein-carrier together with an adjuvant (i.e. Al(OH)3) which would be acceptable in. . . of inducing the prodn. of protective anti-peptide antibodies, as indicated by the demonstration that they are capable of

markedly reducing **allergen**-induced **histamine** release from **IgE antibody**-sensitized rat mast cells in vitro.

L5 ANSWER 40 OF 71 CAPLUS COPYRIGHT 2003 ACS on STN
AB The effect of suplatast tosilate (IPD-1151T) which can inhibit both **IgE antibody** prodn. and antigen-induced **histamine** release from mast cells, on the type I **allergic** reactions was studied in various exptl. models. IPD-1151T inhibited the 48-h homologous passive cutaneous anaphylaxis (PCA) in rats in a dose-dependent fashion. This inhibitory activity was clearly increased by successive **administration** of the agent for 2 to 4 wk. The inhibition of 48-h homologous PCA by IPD-1151T was also found in. . . not affect the increase in capillary permeability induced by histamine in rats. These results demonstrate that IPD-1151T inhibits type I **allergic** reaction.

L5 ANSWER 41 OF 71 CAPLUS COPYRIGHT 2003 ACS on STN
AB The ability was reexamd. of anti-human IgG **antibodies** to induce **histamine** release from human basophils. A panel of purified murine mAbs with International Union of Immunol. Societies-documented specificity for each of the 4 subclasses of human IgG was used. Of the **allergic** subjects studied, the basophils of 75% (18/24) released >10% histamine to .gtoreq.1 anti-IgG1-4 mAb, whereas none of the nonatopic donor's. . . after stimulation with optimal amts. of anti-IgG mAb. The basophils of 85% (11/13) of the nonatopic donors did respond to anti-**IgE** challenge, as did 92% (22/24) of the atopic donor cells. Histamine release was induced most frequently by anti-IgG3, and 10/18. . . of the anti-IgG mAb were required for maximal histamine release, about 1000-fold higher than those for comparable release with antihuman **IgE**. Specificity studies using both immunoassays and inhibition studies with **IgE** myeloma protein indicated that anti-IgG induced histamine release was not caused by cross-reactivity with **IgE**. Ig receptors were opened by lactic acid **treatment** so that the cells could be passively sensitized. Neither **IgE** myeloma nor IgG myeloma (up to 15 mg/mL) proteins could restore the response to anti-IgG mAb. However, sera from individuals with leukocytes that released histamine upon challenge with anti-IgG mAb could passively sensitize acid-**treated** leukocytes from both anti-IgG responder and nonresponder donors for an anti-IgG response. The only anti-IgG mAb that induced release from. . . could not restore an anti-IgG response. These data led to the hypothesis that the IgG specific mAb were binding to IgG-**IgE** complexes that were attached to the basophil through **IgE** bound to the **IgE** receptor. This was shown to be correct because passive sensitization to anti-IgG was blocked by previous exposure of the basophils to **IgE**. Thus, anti-IgG-induced release occurs as a result of binding to IgG anti-**IgE** antibodies and crosslinking of the **IgE** receptors on basophils.

L5 ANSWER 42 OF 71 CAPLUS COPYRIGHT 2003 ACS on STN
AB . . . a histamine-releasing peptide comprising a cationic N-terminal head and a hydrophobic C-terminal tail, together with a residue capable of eliciting **antibodies** against the peptide while inhibiting **histamine** release by the peptide is useful in anti-**allergy** **treatment**. Preferably the histamine-releasing peptide is Lys-Thr-Lys-Gly-Ser-Gly-Phe-Phe-Val-Phe (I), optionally amidated at the C terminus. **Antibodies** to the **histamine**-releasing peptide are useful for passive immunization. Rats immunized with I-NH2 conjugated with keyhole limpet hemocyanin before or after sensitization with ovalbumin gave pronounced IgM and IgG anti-peptide antibody responses in contrast to controls, but no significant **IgE** anti-peptide responses.

L5 ANSWER 43 OF 71 CAPLUS COPYRIGHT 2003 ACS on STN
AB This study had two purposes. First, to examine a possible functional

heterogeneity of **IgE** regulating basophil histamine release and the effect of using two different donor cells for passive sensitization expts. Second, to investigate basophils not releasing histamine to anti-**IgE** by stimulating protein kinase C with the addn. of the phorbol-ester, TPA. In consecutive expts. responding donor basophils were passively sensitized with plasma from non-responding subjects. Thus, the first set of expts. included passive sensitization of acid **treated** donor basophils from one atopic and one non-atopic patient with plasma from 29 children with exogenous asthma to grass pollen, cat dander, or dust mites. Different secretagogues (anti-**IgE**, Con A, and N-formyl-methionyl-leucyl-phenylalanine) induced different histamine release responses due to a cellular property of the basophils not related to the type of **IgE** bound to the cell membrane. The **allergen**-induced histamine release did not depend on the ext. or type of **IgE** when the biol. activity of each ext. and serum-specific **IgE** levels were similar. However, the atopic donor cells released more histamine than non-atopic donor cells. Thus, histamine release depends on. . . secretagogues and a cellular property which may be influenced by the presence of serum factors and a certain type of **IgE** in the serum of atopics. The second set of expts. included 10 patients (6 atopics and 4 non-atopics) with non-histamine releasing basophils. In the presence of 10 ng/mL TPA, however, seven of 10 patients released histamine at anti-**IgE** challenge. Three months later two addnl. patients became responsive in the presence of TPA. By passive sensitization of responding donor basophils the nonresponding patients were shown to possess functionally intact **IgE**. Thus, the discrepancies sometimes obsd. between clin. symptoms, serol. **IgE-antibody** measurements and **histamine** release testing in **allergic** patients may be related to a cellular property of basophils.

L5 ANSWER 44 OF 71 CAPLUS COPYRIGHT 2003 ACS on STN

AB The effects of hydrocortisone, prednisolone, and dexamethasone on **IgE** antibody-mediated immediate hypersensitivity reactions in rats were studied. Forty-eight-hour homologous passive cutaneous anaphylaxis (PCA) was inhibited in a dose-dependent manner by the **administration** of steroids 2 h prior to challenge. When steroids were **administered** at various times before challenge, each steroid showed different patterns of time courses for inhibition of homologous PCA. Max. inhibition was obtained 2 h after the **administration** of each steroid. The **IgE antibody**-mediated **histamine** release from peritoneal mast cell in vivo was inhibited by the **administration** of steroids. Time-courses for the inhibitory affects of steroids on histamine release were slightly different from those in PCA. The. . . by non-corticoidal steroids (17.alpha.-methyltestosterone, androstenedione, and progesterone) or arachidonic acid. These results partially explain the inhibitory action of steroids on **IgE** antibody-mediated immediate hypersensitivity. The inhibition of histamine release would contribute towards the anti-**allergic** action of steroids but not antagonistic effect on the mediators. Also the action of glucocorticoids receptor or the inhibition of. . .

L5 ANSWER 45 OF 71 CAPLUS COPYRIGHT 2003 ACS on STN

AB Human lung tissue passively sensitized with anti-grass pollen **IgE antibodies** released **histamine** [51-45-6] upon exposure to specific grass pollen antigen. Fenoterol (I) [13392-18-2], a .beta.2-sympathomimetic stimulator drug, was a potent inhibitor of. . . 1 .times. 10-7M, and amounted to 67 and 95%, resp. Thus, the .beta.2-receptor stimulator I is a valuable drug for **treating allergic** bronchial asthma, since it exhibits a combination of prophylactic and direct **therapeutic** properties.

L5 ANSWER 46 OF 71 CAPLUS COPYRIGHT 2003 ACS on STN

AB Monkey lung fragments passively sensitized in vitro with human serumrich in immunoglobulin (Ig)E **antibody** released both **histamine** and slow-reacting substance of anaphylaxis (SRS-A) upon challenge with specific **allergen** or anti-**IgE**. The sensitizing activity of the atopic serum was heat labile and was removed by **treatment** with an anti-**IgE** immunosorbent. In the reversed-type reactions, 7 S anti-**IgE** and its F(ab')2 fragments had comparable activity in mediating the release of both histamine and SRS-A, and Fab' fragments did not release either mediator suggesting that bridging of 2 cell-bound **IgE** mols. may be the initial step of the reaction. Monospecific antiserum against human IgG, IgM, IgA, or IgDfailed to release. . . . sensitized tissue. Isolated E myeloma protein also sensitized monkey lung fragments for the release of both histamine and SRS-A by anti-**IgE**. It thus appears that **IgE** sensitizes monkey lung fragments for the direct (antigen-induced) or reversed (anti-**IgE**-induced) release of both histamine and SRS-A.

L5 ANSWER 47 OF 71 USPATFULL on STN

SUMM . . . causative microorganism, skin tests using crude antigens, Malassezia cell extracts as described above, provocative tests, quantitative assay tests for various **IgE antibodies** by RAST **method**, assay for **histamine** release, and the like, and other approaches are performed, in addition to microbiological cultivation tests. Because these crude antigens contain. . . antigen can pose a risk of development of adverse reactions, and the like. Moreover, when using the crude antigen for **therapy** of hyposensitization, there is a risk of anaphylactogenesis associated therewith, posing extreme limitation on the dose of the crude antigen, so that **therapeutic** effects cannot be expected. In addition, it is also difficult to use the crude antigen as a vaccine for preventing. . . Malassezia, and there is, therefore, a major set back on the infections caused by Malassezia fungi and the diagnosis and **therapy** of **allergoses**.

L5 ANSWER 48 OF 71 USPATFULL on STN

DETD . . . at least one binding specificity for CD89 and at least one binding specificity for an epitope on a lymphocyte producing **IgE** can be used to **treat allergies**. The antibody for use in **treating allergy** in a subject can also be a binding agent having at least one antigen binding region specific for an epitope on an **IgE** antibody. Accordingly, such a binding agent can link an effector cell expressing CD89 and a target cell whose surface is coated with **IgE**, such as a basophil and a mast cell, resulting in lysis of the target cells. Such a **treatment** can also prevent binding of an antigen to the **IgE** molecules and thus prevent secretion by these cells of mediators involved in **allergy**, e.g., **histamine**. Additionally, the **antibody** can bind soluble **IgE** and thereby prevent binding of **IgE** to mast cells and basophils.

L5 ANSWER 49 OF 71 USPATFULL on STN

DETD . . . In another embodiment of the invention, compositions of the invention may be used in the design of vaccines for the **treatment** of **allergies**. Antibodies of the **IgE** isotype are important components in **allergic** reactions. Mast cells bind **IgE antibodies** on their surface and release **histamines** and other mediators of **allergic** response upon binding of specific antigen to the **IgE** molecules bound on the mast cell surface. Inhibiting production of **IgE** antibodies, therefore, is a promising target to protect against **allergies**. This should be possible by attaining a desired T helper cell response. T helper cell responses can be divided into. . . protective IgG antibodies. In contrast, a critical cytokine produced by

T.sub.H2 cells is IL-4, which drive B cells to produce **IgE**. In many experimental systems, the development of T.sub.H1 and T.sub.H2 responses is mutually exclusive since T.sub.H1 cells suppress the induction. . . . Thus, antigens that trigger a strong T.sub.H1 response simultaneously suppress the development of T.sub.H2 responses and hence the production of **IgE** antibodies. Interestingly, virtually all viruses induce a T.sub.H1 response in the host and fail to trigger the production of **IgE** antibodies (Coutelier et al., J. Exp. Med. 165:64-69 (1987)). This isotype pattern is not restricted to live viruses but has. . . (1998)) Thus, by using the processes of the invention (e.g., Alpha Vaccine Technology), viral particles can be decorated with various **allergens** and used for immunization Due to the resulting "viral structure" of the **allergen**, a T.sub.H1 response will be elicited, "protective" IgG antibodies will be produced, and the production of **IgE** antibodies which cause **allergic** reactions will be prevented. Since the **allergen** is presented by viral particles which are recognized by a different set of helper T cells than the **allergen** itself, it is likely that the **allergen**-specific IgG antibodies will be induced even in **allergic** individuals harboring pre-existing T.sub.H2 cells specific for the **allergen**. The presence of high concentrations of IgG antibodies may prevent binding of **allergens** to mast cell bound **IgE**, thereby inhibiting the release of **histamine**. Thus, presence of IgG **antibodies** may protect from **IgE** mediated **allergic** reactions. Typical substances causing **allergies** include: grass, ragweed, birch or mountain cedar pollens, house dust, mites, animal danders, mold, insect venom or drugs (e.g., penicillin). Thus, immunization of individuals with **allergen**-decorated viral particles should be beneficial not only before but also after the onset of **allergies** Food **allergies** are also very common, and immunization of subjects with particles decorated with food **allergens** should be useful for the **treatment** of these **allergies**.

L5 ANSWER 50 OF 71 USPATFULL on STN
SUMM . . . distinct G-protein coupled receptors. It plays a role in immediate hypersensitivity reactions and is released from mast cells following antigen **IgE antibody** interaction. The actions of released **histamine** on the vasculature and smooth muscle system account for the symptoms of the **allergic** response. These actions occur at the H.sub.1 receptor (Ash, A. S. F. and Schild, H. O., Br. J. Pharmacol., 1966,. . . H.sub.3 receptors have also recently been identified in peripheral tissues such as vascular smooth muscle. Consequently there are many potential **therapeutic** applications for histamine H.sub.3 agonists, antagonists, and inverse agonists. (See: "The Histamine H.sub.3 Receptor-A Target for New Drugs", Leurs, R.,. . .

L5 ANSWER 51 OF 71 USPATFULL on STN
SUMM . . . distinct G-protein coupled receptors. It plays a role in immediate hypersensitivity reactions and is released from mast cells following antigen **IgE antibody** interaction. The actions of released **histamine** on the vasculature and smooth muscle system account for the symptoms of the **allergic** response. These actions occur at the H.sub.1 receptor (Ash, A. S. F. and Schild, H. O., Br. J. Pharmacol., 1966,. . . H.sub.3 receptors have also recently been identified in peripheral tissues such as vascular smooth muscle. Consequently there are many potential **therapeutic** applications for histamine H.sub.3 agonists, antagonists, and inverse agonists. (See: "The Histamine H.sub.3 Receptor-A Target for New Drugs", Leurs, R.,. . .

L5 ANSWER 52 OF 71 USPATFULL on STN
DETD [0026] The present invention provides compositions and **methods**

useful in screening for modulators, particularly inhibitors, of the production of **IgE** antibodies. In particular, assay methodologies are provided that are amenable to high-throughput screening strategies, such that large numbers of potential drugs may be screened rapidly and efficiently. Generally, traditional **treatments** for **IgE** suppression are based on regulation of the system after **IgE** has been made, for example using anti-**IgE antibodies** or anti-**histamines**, to modulate the **IgE**-mediated response resulting in mast cell degranulation. In some cases, drugs are known that generally downregulate **IgE** production or that inhibit switching but not induction of germline transcripts (see for example Loh et al., J. **Allerg**. Clin. Immunol. 97(5):1141 (1996)).

L5 ANSWER 53 OF 71 USPATFULL on STN

DETD [0035] The present invention provides compositions and **methods** useful in screening for modulators, particularly inhibitors, of the production of **IgE** antibodies. In particular, assay methodologies are provided that are amenable to high-throughput screening strategies, such that large numbers of potential drugs may be screened rapidly and efficiently. Generally, traditional **treatments** for **IgE** suppression are based on regulation of the system after **IgE** has been made, for example using anti-**IgE antibodies** or anti-**histamines**, to modulate the **IgE**-mediated response resulting in mast cell degranulation. In some cases, drugs are known that generally downregulate **IgE** production or that inhibit switching but not induction of germline transcripts (see for example Loh et al., J. **Allerg**. Clin. Immunol. 97(5):1141 (1996)).

L5 ANSWER 54 OF 71 USPATFULL on STN

SUMM . . . causative microorganism, skin tests using crude antigens, Malassezia cell extracts as described above, provocative tests, quantitative assay tests for various **IgE antibodies** by RAST **method**, assay for **histamine** release, and the like, and other approaches are performed, in addition to microbiological cultivation tests. Because these crude antigens contain. . . antigen can pose a risk of development of adverse reactions, and the like. Moreover, when using the crude antigen for **therapy** of hyposensitization, there is a risk of anaphylactogenesis associated therewith, posing extreme limitation on the dose of the crude antigen, so that **therapeutic** effects cannot be expected. In addition, it is also difficult to use the crude antigen as a vaccine for preventing. . . Malassezia, and there is, therefore, a major set back on the infections caused by Malassezia fungi and the diagnosis and **therapy** of **allergoses**.

L5 ANSWER 55 OF 71 USPATFULL on STN

DETD [0013] In the practice of the invention, the anti-**IgE**, the ISO and the **allergen** can be **administered** to the subject in any order, or simultaneously. Further, the active ingredients described in any of the embodiments herein (i.e., anti-**IgE** antibody, ISO and **allergen**) may be combined into a single composition for simultaneous **administration** of one or more of the active ingredient(s). The ISO can be a CpG-containing oligonucleotide, including those described in U.S.. . . The electron-withdrawing group can be a bromine, or another such group as described in International Application No. WO 99/62923. The anti-**IgE** antibody can be E25, E26 or E27, each of which are described in US Patent No. 5,994,51 1, or another humanized antibody anti-**IgE antibody** which does not induce **histamine** release, including those described in U.S. Pat. No. 5,958,708. Hu-901 is an anti-**IgE** antibody in development derived from one of the same variable regions as one of the fragments described in U.S. Pat..

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L5 ANSWER 56 OF 71 USPATFULL on STN
SUMM . . . distinct G-protein coupled receptors. It plays a role in immediate hypersensitivity reactions and is released from mast cells following antigen **IgE antibody** interaction. The actions of released **histamine** on the vasculature and smooth muscle system account for the symptoms of the **allergic** response. These actions occur at the H.sub.1 receptor (Ash, A. S. F. and Schild, H. O., Br. J. Pharmacol., 1966,. . . H.sub.3 receptors have also recently been identified in peripheral tissues such as vascular smooth muscle. Consequently there are many potential **therapeutic** applications for histamine H.sub.3 agonists, antagonists, and inverse agonists. (See: "The Histamine H.sub.3 Receptor-A Target for New Drugs", Leurs, R.,. . .

L5 ANSWER 57 OF 71 USPATFULL on STN
SUMM . . . distinct G-protein coupled receptors. It plays a role in immediate hypersensitivity reactions and is released from mast cells following antigen **IgE antibody** interaction. The actions of released **histamine** on the vasculature and smooth muscle system account for the symptoms of the **allergic** response. These actions occur at the H.sub.1 receptor (Ash, A. S. F. and Schild, H. O., Br. J. Pharmacol., 1966,. . . H.sub.3 receptors have also recently been identified in peripheral tissues such as vascular smooth muscle. Consequently there are many potential **therapeutic** applications for histamine H.sub.3 agonists, antagonists, and inverse agonists. (See: "The Histamine H.sub.3 Receptor-A Target for New Drugs", Leurs, R.,. . .

L5 ANSWER 58 OF 71 USPATFULL on STN
SUMM . . . distinct G-protein coupled receptors. It plays a role in immediate hypersensitivity reactions and is released from mast cells following antigen **IgE antibody** interaction. The actions of released **histamine** on the vasculature and smooth muscle system account for the symptoms of the **allergic** response. These actions occur at the H.sub.1 receptor (Ash, A. S. F. and Schild, H. O., Br. J. Pharmacol., 1966,. . . H.sub.3 receptors have also recently been identified in peripheral tissues such as vascular smooth muscle. Consequently there are many potential **therapeutic** applications for histamine H.sub.3 agonists, antagonists, and inverse agonists. (See: "The Histamine H.sub.3 Receptor-A Target for New Drugs", Leurs, R.,. . .

L5 ANSWER 59 OF 71 USPATFULL on STN
SUMM In a minority of patients with **allergic** symptoms, positive skin tests and clearly detectable **IgE antibodies**, no in vitro **histamine** release can be obtained from the patients' basophil leukocytes with **allergen**. This phenomenon makes it impossible to interpret the results of a histamine release test if positive controls are not available and limits the usefulness of the test in diagnosing **allergic** disease. Levy and Osler, J. Immunol., 99: 1062-1067 (1967) reported that leukocytes from only 20 to 30% of non-**allergic** individuals exhibit histamine release upon passive sensitization with **allergen**-specific **IgE** followed by **allergen** challenge in vitro. Ishizaka et al., J. Immunol., 111: 500-511 (1973) expanded the usefulness of the test by showing that. . . the histamine release induced by passive sensitization of leukocytes with anti-ragweed serum and challenge with ragweed antigen. Prahl et al., **Allergy**, 43: 442-448 (1988) reported the passive sensitization of isolated, **IgE**-deprived leukocytes from non-**allergic** individuals with serum from a non-releasing **allergic** patient followed by **allergen** -induced histamine release. However, the Prahl et al. **method**

requires isolation of control leukocytes from the whole blood of a non-**allergic** donor followed by removal of **IgE** bound to the donor cells. Additionally, the Levy et al., Ishizaka et al., and Prahl et al. procedures are subject. . .

L5 ANSWER 60 OF 71 USPATFULL on STN
DETD **IgE** is present on three cell types in the body: **IgE** -producing B cells, mast cells, and basophils. If an antigenic epitope of **IgE** is present on B cells and not on basophils and mast cells, these epitopes (defined as **ige**.bl) are virtually unique cell surface markers of **IgE**-bearing B cells and **antibodies** against them do not induce **histamine** release. These markers, therefore, provide targets for several types of monoclonal or polyclonal antibody-based **therapy** for **IgE**-mediated **allergic** diseases, and provide a means to differentiate B cells producing **IgE** from B cells producing other isotypes.

L5 ANSWER 61 OF 71 USPATFULL on STN
SUMM . . . damage the basophil even after coupling with the basophil, i.e., a monoclonal antibody which does not have significant influence on **IgE**-mediated specific histamine release from the basophil or on nonspecific histamine release from the basophil. As a result, the inventors have succeeded in preparing the desired monoclonal antibody. The inventors established a **method** for easily separating basophils by immobilizing such an antibody onto a solid carrier, reacting it with a humoral fluid, capturing. . . with the monoclonal antibody and then removing the unreacted humoral fluid, and succeeded in reacting the separated basophils with an **allergen** or an anti-**IgE antibody** to release **histamine**. Also, the present inventors have established a **method** for testing **IgE**-mediated specific histamine release from basophils which were separated using said antibody, and completed the present invention.

L5 ANSWER 62 OF 71 USPATFULL on STN
DETD The ability of the monoclonal **antibodies** to bind onto and induce **histamine** release from peripheral blood basophils was assessed using cells from extensively-studied atopic patients and healthy volunteers at the Johns Hopkins. . . J. A., Reshef A., Macglashan D. W. Jr.: A rapid percoil technique for the purification of human basophils. J. Immunol. **Methods** 105:107-110, 1987). In the first set of experiments, the 42 test anti-human **IgE** MAbs in ascites and 3 purified control monoclonal antibodies (see table 3) were incubated at 3 or more dilutions (1:100,. . . basophils isolated from the blood of at least 2 patients whose basophils released well to low levels of polyclonal anti-human **IgE** (defined as super releasers) (Lichtenstein L. M., and MacGlashan D. W. Jr.: 1986. The concept of basophil relasibility. J. **Allergy** Clin. Immunol. 77:291-294). All basophil histamine release results were compared to total basophil histamine content as determined by cell lysis. All basophil preparations were controlled using a polyclonal anti-human **IgE** control that triggered the release of >50% of the total cell histamine content.

L5 ANSWER 63 OF 71 USPATFULL on STN
DETD While the migis-.epsilon.-specific monoclonal antibodies can be used for in vivo **therapy** they may also be used in extra-corporeal ex-vivo **therapy**. The **IgE** in the circulation of **allergic** patients can be removed by an affinity matrix (antibody immobilized on a solid phase) that is conjugated with the monoclonal. . . affinity column and enter into the circulation of the patient, the monoclonal antibodies of the invention are preferable to other **antibodies** that can induce **histamine** release from basophils and mast cells.

L5 ANSWER 64 OF 71 USPATFULL on STN
DETD While the migis-.epsilon.-specific monoclonal antibodies can be used for in vivo **therapy** they may also be used in extra-corporeal ex-vivo **therapy**. The **IgE** in the circulation of **allergic** patients can be removed by an affinity matrix (antibody immobilized on a solid phase) that is conjugated with the monoclonal. . . affinity column and enter into the circulation of the patient, the monoclonal antibodies of the invention are preferable to other **antibodies** that can induce **histamine** release from basophis and mast cells.

L5 ANSWER 65 OF 71 USPATFULL on STN
AB The present peptide possesses activity of inhibiting **histamine** release and **IgE antibody** production in the onset of type I-**allergy** and is effective in the prevention or **therapy** of type I-**allergias** such as bronchial asthma, urticaria and **allergic** rhinitis.
DETD The present invention is directed to a novel pentapeptide derived from the pentapeptide corresponding to Fc region of **IgE antibody**, which specifically inhibits the **histamine** release on the basis of **IgE** antibody. The novel pentapeptide also inhibits production of the **IgE** antibody, a factor causing **allergy**. It is therefore expected that the novel pentapeptide is useful as a **therapeutic** agent for preventing or curing **allergic** diseases caused not only by release of chemical transmitters such as histamine but also by increase in the **IgE** antibody. These two aspects of action possessed by the novel pentapeptide may result in blocking two of the three stages of the chain in the onset of type I-**allergic** reactions without combined use of plural drugs. Since components of the novel pentapeptide is natural amino acids, the product will. . .

L5 ANSWER 66 OF 71 USPATFULL on STN
SUMM The present possibilities of **therapy** for **allergic** reactions are limited: as for the symptoms, substances are **administered** which inhibit the action of mediators (for example, antihistamines, corticosteroids, induction of **antibodies** against **histamine**, among others) or which show an immuno-suppressive action (antilymphocyte globulin, cytostatics, corticosteroids). An approach to a causal **therapy** is to be seen in the so-called desensitization. It is the purpose of said desensitization to cause a tolerance of the patient to the antigen by way of a gradually increased **administration** of the causal antigens in each case: this tolerance may be effected by a reduced formation of specific antibodies starting the **allergic** reaction or by the formation of specific antibodies of a certain class which indeed fix the antigen immunologically, however, which cannot cause any **allergic** reactions. Another possibility lies in the **administration** of immunoglobulins of class **IgE**, which are in fact fixed to the Fc receptor of the cell involved in **allergic** reactions, for example the mast cell, but, which do not enter an immunological reaction with the antigen starting the disease. However, this latter **therapeutical** possibility has not been of any practical importance so far, as on the one hand **IgE** is present in human blood in traces only and can only be isolated in very small amounts, and since on the other hand the **administration** of the antibody may involve the transmission of **allergies** for other antigens with which the antibody used enters a specific reaction.

L5 ANSWER 67 OF 71 USPATFULL on STN
SUMM The present state of **therapy** of **allergic** disease includes hyposensitization (repeated injections of offending **allergens** to produce "blocking **antibodies**"), systemic

therapy with anti-**histamines** (which compete with histamines released during the **allergic** reaction) and disodium cromoglycate (which may lower the amount of histamine released by **allergic** reactions). Corticosteroids, isoprenaline and theophylline as well as other medications are also utilized in the **therapy** of **allergy**. However, none of these aforementioned drugs or techniques interfere with the basic **IgE** -mast cell (basophil) reaction itself, and all have significant limitations in usefulness.

L5 ANSWER 68 OF 71 USPATFULL on STN

SUMM The present state of **therapy** of **allergic** disease includes hyposensitization (repeated injections of offending **allergens** to produce "blocking **antibodies**"), systemic **therapy** with anti-**histamines** (which compete with histamines released during the **allergic** reaction) and disodium cromoglycate (which may lower the amount of histamine released by **allergic** reactions). Corticosteroids, isoprenaline and theophylline as well as other medications are also utilized in the **therapy** of **allergy**. However, none of these afore-mentioned drugs or techniques interfere with the basic **IgE** -mast cell (basophil) reaction itself, and all have significant limitations in usefulness.

L5 ANSWER 69 OF 71 USPATFULL on STN

DETD Human atopic **allergy** has been shown to be due to a specific class of antibody (**IgE**), which is heat labile and fixes for long times in the skin after passive transfer with the serum of sensitive. . . . type of antibody is found in the rat. This antibody is non-precipitating. Therefore, it is a most unique type. This **antibody** releases **histamine** and serotonin from mast cells in the rat as it does in the human. Thus, any drug which interferes with the passive cutaneous anaphylaxis reaction in the rat becomes of interest for **treatment** of human **allergy**.

L5 ANSWER 70 OF 71 USPATFULL on STN

DETD Human atopic **allergy** has been shown to be due to a specific class of antibody (**IgE**), which is heat labile and fixes for long times in the skin after passive transfer with the serum of sensitive. . . . type of antibody is found in the rat. This antibody is non-precipitating. Therefore, it is a most unique type. This **antibody** releases **histamine** and serotonin from mast cells in the rat as it does in the human. Thus, any drug which interferes with the passive cutaneous anaphylaxis reaction in the rat becomes of interest for **treatment** of human **allergy**.

L5 ANSWER 71 OF 71 USPATFULL on STN

DETD Human atopic **allergy** has been shown to be due to a specific class of antibody (**IgE**), which is heat labile and fixes for long times in the skin after passive transfer with the serum of sensitive. . . . type of antibody is found in the rat. This antibody is non-precipitating. Therefore, it is a most unique type. This **antibody** releases **histamine** and serotonin from mast cells in the rat as it does in the human. Thus, any drug which interferes with the passive cutaneous anaphylaxis reaction in the rat becomes of interest for **treatment** of human **allergy**.

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